

ASMAYEV, P.G.; MOKHNACHEV, I.G.

Problems pertaining to the identification of sugars in tobacco. Trudy  
KIPP no.19:3-6 '58. (MIRA 12:3)

1. Kafedra tekhnologii tabaka Krasnodarskogo instituta pishchevoy promysh-  
lennosti. (Tobacco—Analysis and chemistry) |

ASMEYEV, P.G.; MOKHNACHEV, I.G.

Phosphorylation in autolytic curing and fermentation processes  
in tobacco. Izv. vys. ucheb. zav.; pishch.tekh. no.3:1/-20 '58.  
(MIRA 11:9)

1. Krasnodarskiy institut pishchevoy promyshlennosti, Kafedra  
tekhnologii tabaka.

(Tobacco curing) (Phosphorylation)

PERESADA, G.; MOKHNACHEV, A.

To work in the communist way means to work efficiently.

Avt.transp. 40 no.5:7-8 My '62.

(MIRA 15:5)

1. Otradnenskoye avtokhozyaystvo Krasnodarskogo avtoupavlaniya.  
(Otradnaya--Transportation Automotive)

KALISHUK, O., kand.tekhn.nauk; DOMASHEVSKIY, A. [Domashevs'kiy, A.],  
inzh.; MOKEVACHENKO, P., inzh.

The strength of joints of concrete elements based on cement  
mortars with additions of polymers. Bud.mat.i konstr. 4 no.6:36-  
39 N-D '62. (MIRA 15:12)  
(Polymers) (Precast concrete construction)

ACCESSION NR: AP4030783

band  $\lambda = 288-290$  millimicrons, corresponding to  $I_3^-$  in the absorption spectra of systems (1) and (2) disappears with a sufficient concentration of  $H_3BO_3$  and PVA, while the band  $\lambda = 350$  millimicrons is preserved. Boron enters into the complex with the  $I_3^-$  anion. Orig. art. has: 3 figures.

ASSOCIATION: Botanicheskiy institut im. V. L. Komarova Akademii nauk SSSR  
(Botanical Institute, Academy of Sciences, SSSR)

SUBMITTED: 10Sep63

DATE ACQ: 30Apr64

ENCL: 00

SUB CODE: OC

NO REF SOV: 002

OTHER: 004

Card 2/2

ACCESSION NR: AP4030783

S/0020/64/155/004/0846/0848

AUTHOR: Mokhnach, V. O.; Zuyeva, I. P.

TITLE: Spectrophotometric investigation of aqueous solutions of iodopolyvinylborate

SOURCE: AN SSSR. Doklady\*, v. 155, no. 4, 1964, 846-848

TOPIC TAGS: iodopolyvinylborate, absorption spectrum, spectral photometric analysis, reaction mechanism, antiseptic, toxicity, iodopolyvinyl alcohol reaction, iodopolyvinyl alcohol boron complex, boron containing polymer

ABSTRACT: The absorption spectra of the systems (1)  $I_2-H_3BO_3-PVA-H_2O$  and (2)  $I_2-KI-H_3BO_3-PVA-H_2O$  was investigated in the 220-800 millimicron range to determine the mechanism of reaction and formation of iodopolyvinylborate. Inclusion of boron to form a complex with the high polymer molecule to give increased antiseptic action and reduced toxicity is presumed analogous to the inclusion of iodine as  $I^-$ . The shift in the absorption spectra of the solution of the band at about 610 millimicrons to 660-680 millimicrons is attributed to the exchange of  $H_3BO_3$  for iodides in the iodopolyvinyl alcohol reaction. The

Card 1/2

ANTROPOVA, T.A.; LOMAGIN, A.G.; MOKHNACH, V.O.; SHUKHTINA, G.G.

Effect of different forms of iodine on plant cells. Dokl. AN  
SSSR 155 no.1:224-226 Mr '64. (MIRA 17:4)

1. Botanicheskiy institut im. V.I.Komarova AN SSSR. Predstavleno  
akademikom N.M.Siskyanom.

AP4009474

solutions these bands are attributed to  $\text{Br}_3^-$ ,  $\text{Br}_2$  and  $\text{BrO}^\bullet$ . Orig.art.has: 2 figures

ASSOCIATION: none

SUBMITTED: 17Apr63

DATE ACQ: 03Jan64

ENCL: 00

SUB CODE: FH,CH

NR REF SOV: 003

OTHER: 005

2/2  
Card

ACCESSION NR: AP4009474

8/0051/83/015/008/0830/0832

AUTHOR: Mokhnach, V.O.; Rusakova, N.M.

TITLE: Absorption spectra of bromine solutions

SOURCE: Optika i spektroskopiya, v.15, no.6, 1963, 830-832

TOPIC TAGS: absorption spectrum, bromine absorption, bromine solution, color center, bromine ion, bromine atom, halogen dissociation

ABSTRACT: The present investigation of the absorption of solutions of bromine in the 220 to 500 mμ region was undertaken in view of the similarities thought to obtain between color centers in solutions of some halogens and the center exhibiting biological activity (antibacterial) in some organic substances. There were investigated the absorption spectra of solutions of bromine in water, in 2% solution of KOH and in sulfuric acid. The solutions were made up of chemically pure grade reagents. The spectra were recorded on an SF-4 spectrophotometer at room temperature. Three principal absorption bands were observed, namely, bands at 264-270 mμ, 390-400 mμ and 322-328 mμ. On the basis of the predominance of these bands in the different solutions and the dissociation processes occurring in neutral, alkaline and acid

Card <sup>1</sup>/<sub>2</sub>

MOKHMACH, V.O.; ZUYEVA, I.P.

Changes in the absorption spectra of aqueous solutions of iodopolyvinyl-  
pyrrolidinone and iodopolyvinyl alcohol in the process of their dialysis.  
Zhur.neorg.khim. 8 no.3:668-671 Mr '63. (MIRA 16:4)

(Pyrrolidionone—Absorption spectra)

(Dialysis) (Vinyl alcohol polymers—Absorption spectra)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900008-6

akademikom I.I.Chernyayevym.  
(Iodine) (Starch)

MOKHNACH, V.O.; BORISOV, L.B.; LITVINOV, M.A.; MAT'KO, N.A.

Antimicrobial properties of high-polymer iodine-containing  
compounds. Trudy LSGMI 66:162-170 '62. (MIRA 17:4)

1. Kafedra mikrobiologii Leningradskogo sanitarno-gigiyenicheskogo  
meditsinskogo instituta (zav. kafedroy - prof. M.N.Fisher).

MOKHNACH, V.O.; RUSAKOVA, N.M.

Spectrophotometric study of iodine compounds with one positive  
valence. Dokl. AN SSSR 143 no.1:122-125 Mr '62.

(MIRA 15:2)

1. Botanicheskiy institut im. V.L.Komarova AN SSSR. Predstavleno  
akademikom I.I.Chernyayevym.  
(Iodine compounds--Spectra)

MOSEVICH, Vladimir Onufriyevich; FIGULEVSKIY, G.V., doktor khim. nauk, prof., otv. red.; FEDOROV, A.I., doktor biol. nauk, prof., otv. red.; BELKINA, M.A., red. izd-va; GALIGANOVA, L.M., tekhn. red.

[Iodine compounds with high polymers, their antimicrobial and therapeutic properties] Soedineniia ioda s vysokopolimerami, ikh antimikrobnnye i lechebnye svoistva. Moskva, Izd-vo Akad. nauk SSSR, 1962. 176 p. (MIRA 15:3)  
(POLYMERS) (IODINE—THERAPEUTIC USE)

SMIRNOVA-IKONNIKOVA, M.I.; PETROVA, T.M.; MOKHNACH, V.O.

Amylose content of starch in seeds of grain and pulse crops. Dokl.  
AN SSSR 140 no.2:485-488 S '61. (MIRA 14:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut rasteniyevodstva.  
Predstavleno akademikom A.I.Oparinyam.  
(Amylose) (Grain) (Legumes)

MOKHACHEV, V.O.; ZUYEVA, I.P.

Spectrophotometric investigation of aqueous solutions of iodopoly-  
vinyl alcohol. Dokl. AN SSSR 136 no.4:832-835 P '61.  
(MIRA 14:1) 4

1. Botanicheskiy institut im. V.I. Komarova AN SSSR i Institut  
obshchey i neorganicheskoy khimii imeni N.S. Kurnakova AN SSSR.  
Predstavleno akademikom I.I. Chernyshevym.  
(Vinyl alcohol—Spectra)

MOKHNACH, V.O.; RUSAKOVA, N.M.

Spectrophotometric study of aqueous solutions of iodine starch and  
iodoamylose. Dokl. AN SSSR 135 no.5:1143-1146 D '60. (MIRA 13:12)

1. Botanicheskiy institut im. V.L.Komarova AN SSSR. Predstavleno  
akademikom I.I.Chernyayevym.  
(Amyloses—Spectra) (Starch—Spectra)

MOKHNACH, V.O.; BORISOV, L.B.; LITVINOV, M.A.; MATYKO, N.A.

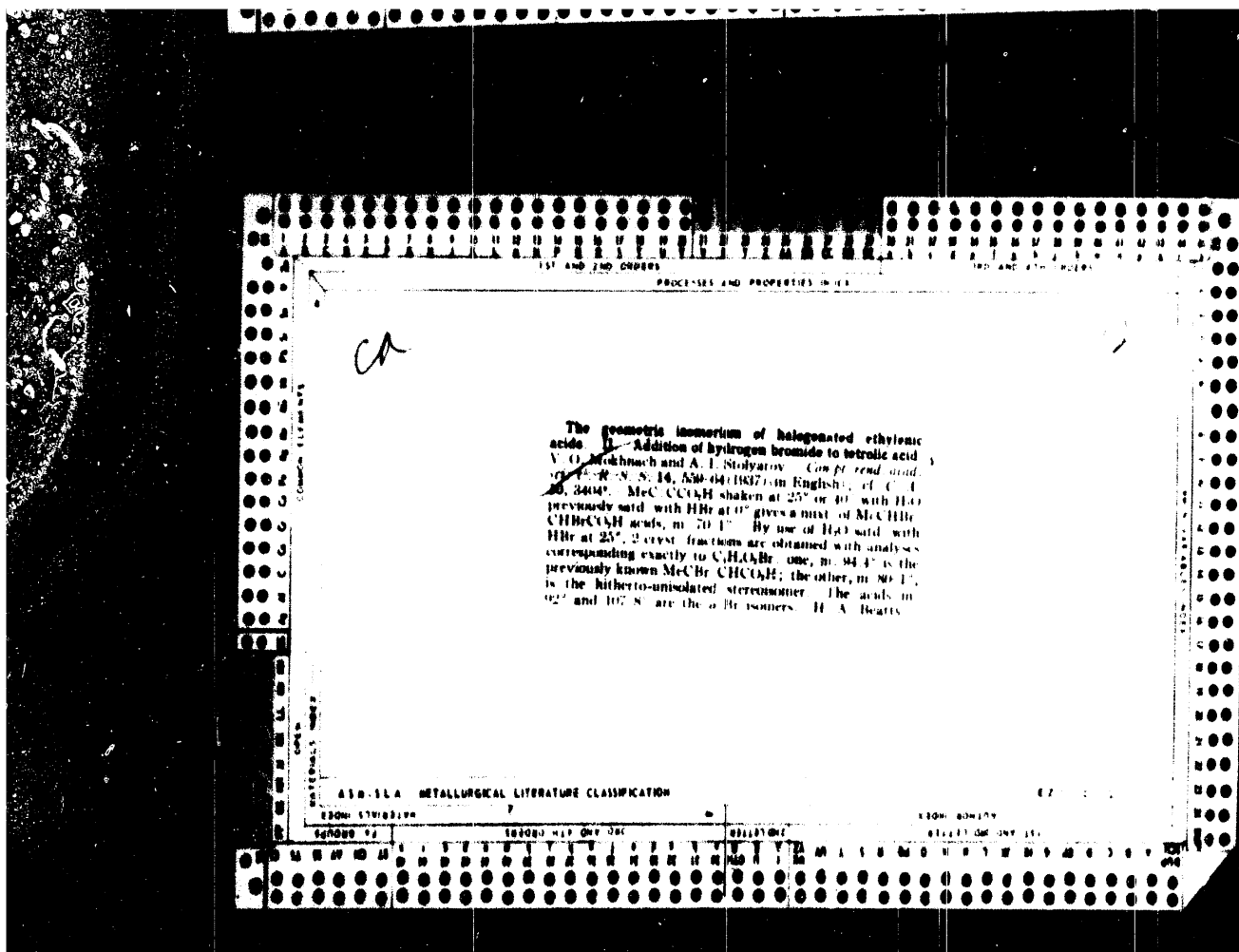
Antibacterial properties of iodine-polyvinyl alcohol. Mikrobiologiya  
29 no. 4:600-602 J1-Ag '60. (MIRA 13:10)

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR i  
Leningradskiy sanitarno-gigiyenicheskiy meditsinskiy institut.  
(ANTISEPTICS) (VINYL ALCOHOL)  
(IODINE ORGANIC COMPOUNDS)

KIR'YALOV, N.P.; LITVINOV, M.A.; MOKHNACH, V.O.; NAUGOL'NAYA, T.N.

Galbanic acid and its derivatives as new antibiotics of plant  
origin. Bot. zhur. 44 no.1:101-104 Ja '59. (MIRA 12:1)

1. Botanicheskiy institut imeni V.L. Komareva AN SSSR, Leningrad.  
(Umbelliferene) (Antibiotics)



left for several hrs. at room temp. and then slowly heated to expel dissolved HBr. Washing the product three times with  $H_2O$ , sepn. of the lower oily layer, diln. with  $Et_2O$ , drying, and removal of the  $Et_2O$  gave V, bp  $118-20^\circ$ , which lost HBr readily. Distn. of 5 g. of V with steam, extrn. of the distillate 3 times with  $H_2O$ , drying and removal of the  $H_2O$  gave IV, bp  $113-15^\circ$ . IV could not be crystd. but was not identical with I or II. II (1.3 g.), heated to boiling with 2.5 g.  $Ba(OH)_2$  in 50 cc.  $H_2O$ , extrd. 3 times with  $Et_2O$ , dried and distd., gave an oil from which III was prepd. by seeding. I with  $Ba(OH)_2$  also gave III.

Louis W. Rutz

**The geometric isomerism of halogenated ethylenic acids.** A. N. Pavlovskii and V. I. Mikhailov. *J. Gen. Chem.* (U. S. S. R.) 3, 1968 (1968). Mikhailov, et al., added

HR to PhC<sub>2</sub>COOH (*J. prakt. Chem.* [2], 60, 67; 52, 346; *Ber.* 19, 1379; 20, 552; 24, 3660), obtaining in each case a pair of isomers which they thought to be geometric. Some Michael's time no expts. have been reported wherein such geometric isomers were prepd. in this way. F. and M. have now prepd. *cis*- (I) and *trans*-Rt-ClBr CHCOOH (II) from HR and RtC<sub>2</sub>COOH (III). To exclude the possibility that one of the compds. might be an  $\alpha$ -Br acid, RtCH<sub>2</sub>CHBrCOOH (IV), they have prepd. IV by removing HR from RtC<sub>2</sub>COOH (V) prepd. by way of RtCHBrCH<sub>2</sub>Br (VI) from BuC<sub>2</sub>COOH (VII). *Reptd.* 94 g. RtCHBrCH<sub>2</sub>Br was added with const. energetic stirring over a period of 2.5 hrs. at 140-7° to 85 g. of finely divided NaNH<sub>2</sub> in 250 cc. of dried (over Na) and redistd. benzene previously heated to 145°. An equal vol. of abs. Et<sub>2</sub>O is added to the cooled mixt., and about 100 l. of thoroughly dried CO<sub>2</sub> introduced into the bottom of the mixt. while constantly cooling and stirring. The ppt. is filtered, dissolved in Et<sub>2</sub>O, acidified with HCl, and acid. 3 times with Et<sub>2</sub>O. Distn. of the residue from the well-dried Et<sub>2</sub>O exts. gave III, b.p. 21°, solidifying in the distillate to feathery crystals, m. 80.6° (after recrystg. 3 times from petr. ether), very sol. in Et<sub>2</sub>O and alc. Yield, 19.5 g.

40%. The K, Na, Ca, Sr, Mg and Ba salts were prepd. and analyzed. III (9.5 g.) and 47 g. eq. HBr (acid soln. at 0°) were mixed and let stand at 0° for 1 day, then shaken continuously for 30 hrs. Addn. to this of an equal vol. of H<sub>2</sub>O, eqn. of the lower oily layer in Et<sub>2</sub>O, drying, and removal of the Et<sub>2</sub>O, gave 14 g. of an oil which, when cooled with ice, sep'd into 2 components. On raising the temp. to 21° the component present in smaller quantity (A) liquefied, while the major component (B) remained cryst. After 3 days in a vacuum desiccator A crystd. Filtration of the crystals, careful washing with H<sub>2</sub>O, drying and washing with ligroin, gave colorless l. m. 24.6° (from ligroin), insol. in H<sub>2</sub>O, difficultly sol. in ligroin, alc. and AcOH, sol. in Et<sub>2</sub>O, A:Me, C<sub>2</sub>H<sub>5</sub>, and PhH. A when twice recrystd. from ligroin gave II, m. 53.5-54°, solubilities as for I. The K, Ca and Ba salts of I and II were prepd. and analyzed. VI was prepd. from VII by the Hell-Volhard-Zelinskii procedure, adding 110 g. Br to a mixt. of 4.2 g. red P and 30 g. VII during 2 hrs. Heating was required only at the very end. Addn. of 120 cc. boiling H<sub>2</sub>O dropwise with const. stirring, cooling, extg. thrice with Et<sub>2</sub>O, drying, distn. of the residue from the Et<sub>2</sub>O, gave 24 g. VI, b.p. 109.5-110.5°. VII (11.8 g.) was recovered from the lower-boiling fraction. The Na, Ca, Mg and Sr salts of VI were prepd. and analyzed. The b.p. for VI given by Shimmer (*Ber.* 35, 404) and reproduced in Beilstein is incorrect. VI (18 g.) and 17 g. dried Br were heated for 5-6 hrs. in a sealed tube at 145-60°, cooled at -18° for 1 hr., the tube broken and cooled for several hrs. more, the mixt. then poured into ice and H<sub>2</sub>O.

ASR-51A METALLURGICAL LITERATURE CLASSIFICATION

NEW YORK

CHICAGO

BELLEVILLE

FROM NEW YORK

NEW YORK

Preparation of acetylenecarboxylic acids with sodium  
 amide. Synthesis of ethynylpropiolic acid. A. E. Pavlov  
 and V. O. Mikhaylov. *Bull. For Eastern Branch  
 Acad. Sci. (U.S.S.R. No. 9, 3-6 (in German 7) (1934),  
 cf. P., J. Russ. Phys.-Chem. Soc. 10, 618 (1907); F. and  
 Lupach, *Ibid.* 20, 96 (1907). —  $\text{EtC}\equiv\text{CCO}_2\text{H}$  (I), b.p. 2.2,  
 m. 20.6° (petr. ether), was obtained in 60% yield (based  
 on 1,2-BuBr, (II)) when to a mixt. of 80 g.  $\text{NaNH}_2$   
 (ground) and 200 cc. of kerosene (dried with Na and  
 redist.) was added, with stirring, 94 g. of II at 145°  
 within 2.5 hrs., the reaction mixt. chl'd. with an equal vol.  
 of dry  $\text{Et}_2\text{O}$  and treated with a current of dry  $\text{CO}_2$  with  
 cooling, the ppt. filtered off, dissolved in  $\text{H}_2\text{O}$ , the soln.  
 acidified with  $\text{HCl}$  and I ext'd. with  $\text{Et}_2\text{O}$  and dist'd. in  
 vacuo. Poor yields (2-3%) of I resulted by the action  
 of  $\text{NaNH}_2$  on the mixed chlorides of  $\text{MeCOH}$  (obtained  
 by the interaction with  $\text{PCl}_5$ ) in paraffin or kerosene  
 medium (cf. Mounier and Desparmet, *C. A.* 18, 2125),  
 with and without the sepn. of the intermediate  $\text{EtC}\equiv\text{CH}$ ,  
 and the mixt. with  $\text{CO}_2$ . Chas. Blum.*

ADD-51.1 METALLURGICAL LITERATURE CLASSIFICATION  
 LONDON 1934

LONDON 1934

LONDON 1934

LONDON 1934

LONDON 1934

structure was proved by heating with KOH which decarboxylated the compound into ammonia and  $C_2H_6$ . For H fixation several catalysts were tried. Pd black is more efficient than colloidal Pd and that pptd. on  $BaCl_2$ . Pd black (0.8 g.) effects an addn. of 3 H atoms to the mol. of the glycol (1.6 g.) dissolved in 50 cc.  $Et_2O$  in 10-15 min. while the satn. as required 315 min. This difference in time of reaction is characteristic for hydrogenation of a triple bond with Pd, as Pt requires for fixation of the first 2 atoms as much time as required 315 min. The ethylene glycol crysd. from MeOH + Me<sub>2</sub>CO given crystals for the 2nd pair. The ethylene glycol crysd. from MeOH + Me<sub>2</sub>CO (calcd. 322). m. 165-7°, sol. in ether, benzene,  $CHCl_3$ , petr. ether, mol. wt. 316-323 (calcd. 322). gives a yellow color with concd.  $H_2SO_4$ , does not decolorize  $KMnO_4$ , ether, benzene, petr. gives a yellow color with concd.  $H_2SO_4$ , the yellow color with  $H_2SO_4$  is very slight; Br and ether, mol. wt. 315 (calcd. 324); the yellow color with  $H_2SO_4$  is more difficult to synthesize and to hydrogenate than other acetylene glycols.

I. G. THOMPSON

MOKHNACH, V.O.

Preliminary data on the use of amyl iodide (amyloiodine) in patients with dysentery. Trudy ISGMI 46:146-152 '59. (MIRA 13:11)

1. Kafedra infektsionnykh bolezney Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. kafedroy - prof. V.V. Kosmachevskiy).  
(DYSENTERY) (STARCH)

MOKHNACH, V.O.  
USSR / Microbiology - Microbes Pathogenic to Humans and Animals F-4

Abs Jour: Referat. Zh. Biol., No. 1, 1958, 732

Author : Mokhnach, V.O.

Title : Etiology and Pathogenesis of Bacterial Dysentery

Orig Pub: Zh. mikrobiol., epidemiol. i immunobiologii,  
1957, No. 1, 11-16

Abstract: The author considers dysentery an allergic disease. Shigella and their toxins which penetrate into the intestinal tract sensitize "RES" of the colon. Simultaneously there is an absorption by the small intestine of allergy-producing dysentery toxin and its penetration into blood circulation with the blood carrying the toxin then to the sensitized "RES" elements of the intestinal walls where, as a result of interaction between the antigen and

Card 1/2

MOKHACH, N.A. [Makhnach, N.A.]

Principal stages in the development of vegetation during the Pleistocene  
period in White Russia. Vestsi AN BSSR Ser. biial.nau. no.4:68-75  
'58. (MIRA 12:4).

(White Russia--Paleobotany, Stratigraphic)

ACC NR: AP7013701

for computing the apparent density when computing the photodissociation of luminescent molecules. This is followed by the necessary data and formula for computing the value  $\tau$ . Also considered is the possibility of photodissociation of  $C_2$  by the far ultraviolet radiation of the sun. Certain of Miller's conclusions are refuted. An estimate is made of the emission coefficient. It is concluded that the total quantity of  $C_2$  molecules (and the decay products) is  $1.5 \cdot 10^{32}$ . This article was presented by Academician B. P. Konstantinov on 12 February 1966. Orig. art. has: 2 formulas and 1 table. [JPRS: 40,106]

Card 2/2

ACC NR: AP7013701

SOURCE CODE: UR/0020/66/171/004/0827/0829

AUTHOR: Mokhnach, D. O.

ORG: Leningrad Agricultural Institute (Leningradskiy sel'skokhozyaystvennyy institut)

TITLE: Investigation of the carbon coma of the comet 1959k

SOURCE: AN SSSR. Doklady, v. 171, no. 4, 1966, 827-829

TOPIC TAGS: comet, photodissociation, solar UV radiation

SUB CODE: 03,20

ABSTRACT:

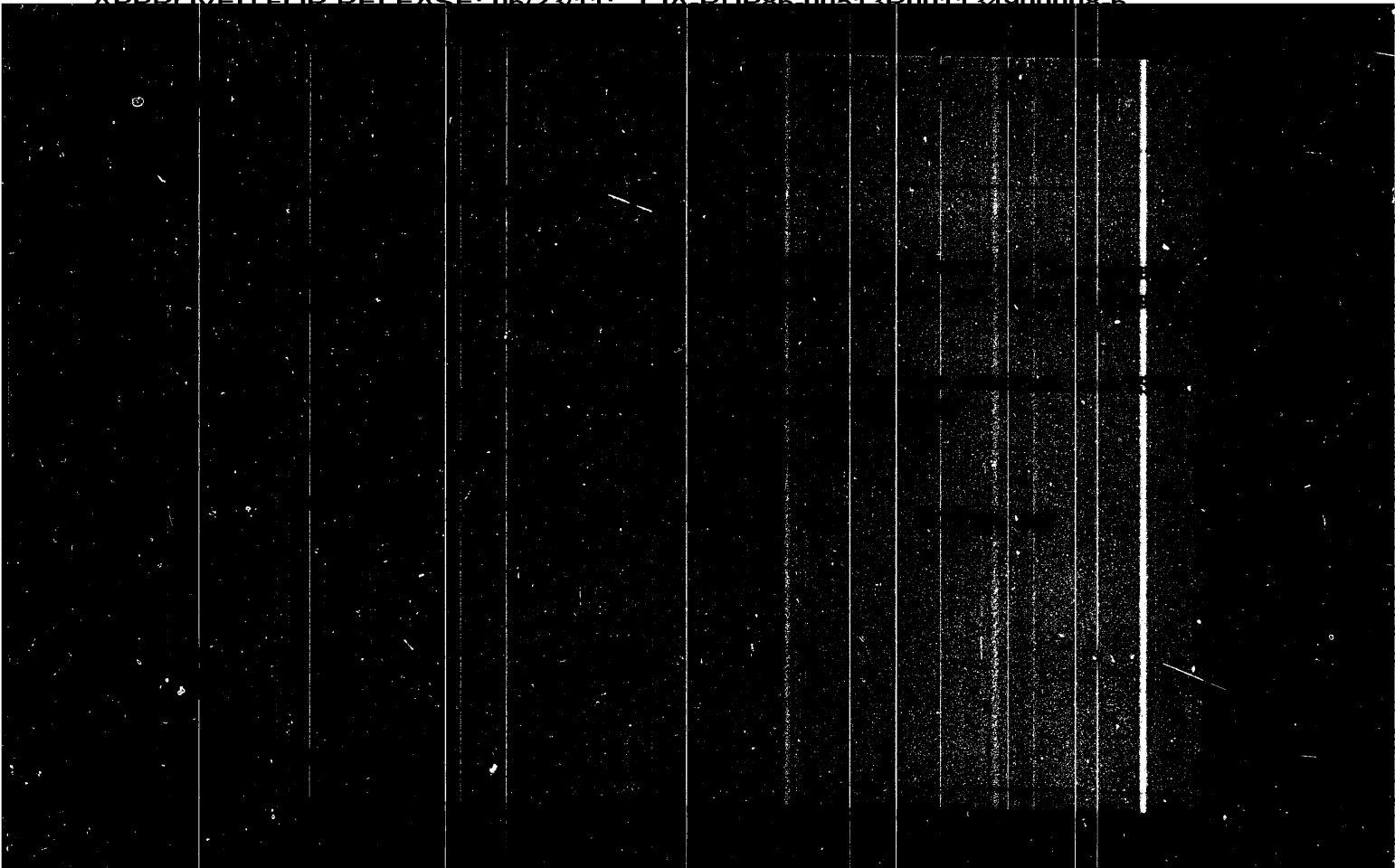
For clarification of the law of distribution of surface brightness discovered by F. Miller (Ap. J., 134, 1007, 1961) in the comet 1959k the author proposed a model in Doklady AN SSSR, 157, No. 2, 1964; the article cited below gives new information which the author has developed, which has led to a new model of the comet. His first consideration is on the initial velocity ( $v_0$ ) of  $C_2$  molecules. The value  $v_0 = 1.2 \cdot 10^5$  cm/sec, stipulated in the former model, has now been reconsidered; the new value is  $3 \cdot 10^5$  cm/sec. The increase of  $v_0$  leads to a decrease of the value  $\tau$  -- the lifetime of molecules during photodissociation -- in the new model. Mokhnach then presents a formula

Card 1/2

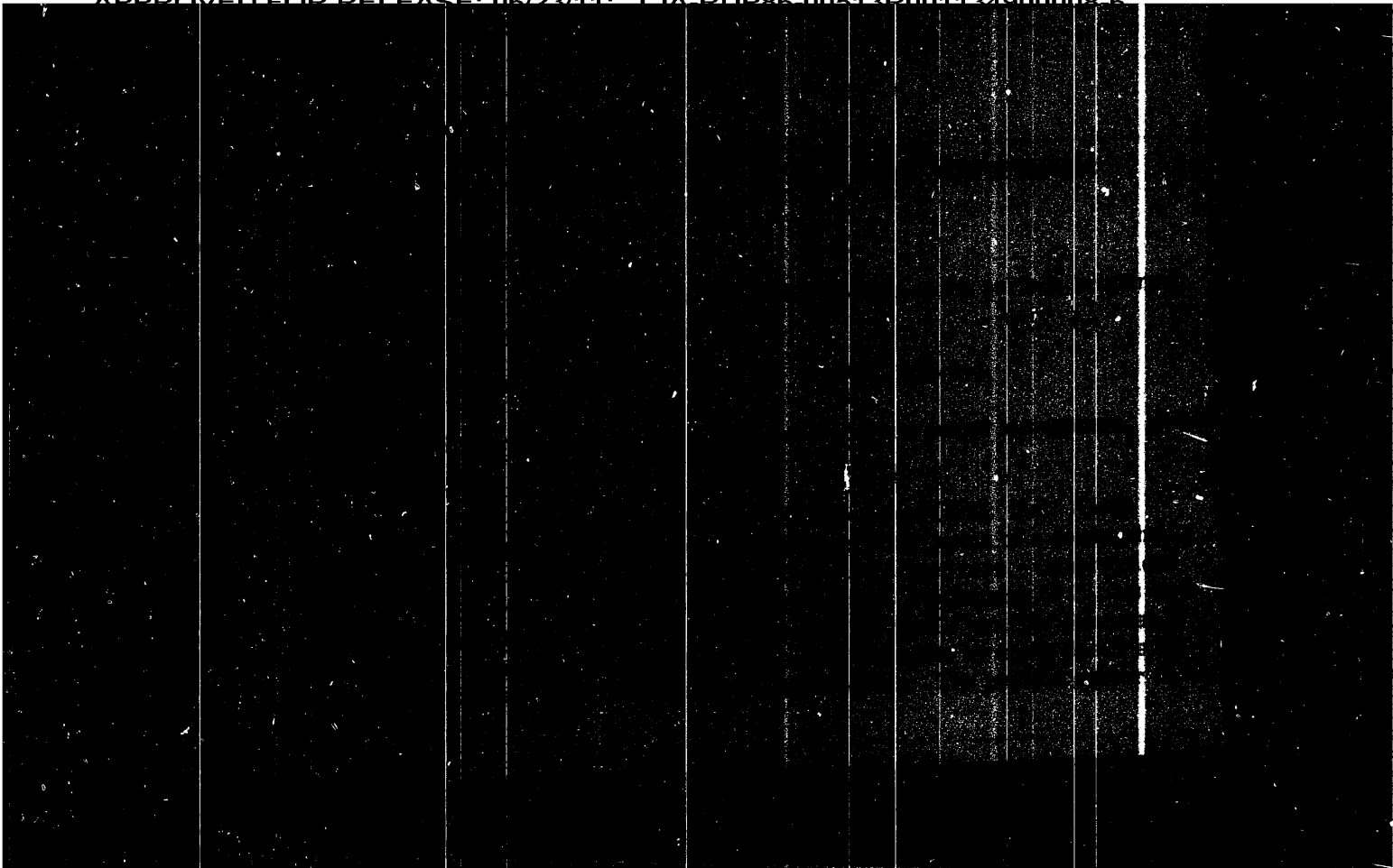
UDC: 523.68

0933 2/58

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MOKHNACH, D.O.

Determination of the physical characteristics of the cyanogen  
halos about Halley's Comet of 1910 II. Dokl. AN SSSR 142  
no.2:304-307 Ja '62. (MIRA 15:2)

1. Leningradskiy sel'skokhozyaystvennyy institut. Predstavleno  
akademikom V.A.Ambartsunyanom.  
(Halley's comet)  
(Cyanogen--Spectra)

MOKENACH, D.O.

Simple model of comet halos. Dokl. AN SSSR 141 no.3:578-581  
N '61. (MIRA 14:11)

1. Leningradskiy sel'skokhozyaystvennyy institut. Predstavleno  
akademikom V.A. Ambartsunyanom.  
(Comets) (Astronomical models)

SOV/20-120-6-17/59

**A General Case of Steady Apparent Density Distribution in the Head of a  
Comet at Constant Isotropic Emission**

dependently of the position of the observer with respect to the comet. This distribution theorem is an independent proof for the correctness of the hypothesis concerning the existence of parental molecules. The expressions deduced are applicable also in unsteady distributions within present-day experimental errors. There are 2 references. which are Soviet.

**PRESENTED:** February 10, 1958, by V. A. Ambartsumyan, Member, Academy of Sciences, USSR

**SUBMITTED:** February 9, 1958

1. Comets--Density    2. Molecules--Motion    3. Mathematics  
--Applications

Card 2/2

**AUTHOR:** Mokhnach, D. O. SOV/20-20-6-17/59

**TITLE:** A General Case of Steady Apparent Density Distribution in the Head of a Comet at Constant Isotropic Emission (Obshchiy sluchay statsionarnogo raspredeleniya vidimoy plotnosti v golove komety pri uslovii postoyannoy izotropnoy emissii)

**PERIODICAL:** Doklady Akademii nauk SSSR, 1958, Vol 120, Nr 6, pp 1228 - 1230 (USSR)

**ABSTRACT:** If the emission center is at rest with respect to the sun, the law governing the distribution of visible density is independent of the position of the observer, that is to say, it is independent of the angle between the direction of observation and the line between the emission center and the sun. First the equations of motions for the molecules are given and a formula for the computation of the visible density is written down. Then a transformation to a new cometocentric frame of reference is carried out. The expression for the visible density proceeding from this transformation shows the following: When at a constant isotropic emission a steady distribution is reached the visible density varies inversely as the distance from the emission center. This is true in-

Card 1/2

## Formation of Gaseous Tails in Comets

20-118-5-12/59

tail of the comet.  $g$  can be changed suddenly and assume the new value  $g_+$ ; furthermore the radiation power of the molecule can change. Then the equations of motion of the ionized molecules are given. From it the final expression for  $N(x,y)$  is computed; it is given here explicitly and is shortly discussed. The circular shape of the isophotic lines is conserved only in that range in which no ionized molecules are observed. There are 3 references, 3 of which are Soviet

**ASSOCIATION:** Leningradskiy sel'skokhozyaystvennyy institut  
(Leningrad Agricultural Institute)

**PRESENTED:** September 12, 1957, by V. G. Fesenkov, Member,  
Academy of Sciences, USSR

**SUBMITTED:** June 12, 1957

Card 3/3

## Formation of Gaseous Tails in Comets

20-118-5-12/59

$z_1$  and  $z_2$  or  $t_1$  and  $t_2$  here denoting the smallest and the greatest value of  $z$  or  $t$  in the case of given  $x, y$ , and in the case of a steady distribution of the visible density. The author here investigates the formation of the tail for following special case: the molecules which form the tail of the comet are formed by photodissociation of the primary molecules separated from the solid core of the comet. The emission is constant during a certain time interval. In order to simplify the computation of the isophotic lines the core (center of gravity) of the comet is considered as immovable with respect to the sun. The molecules under the influence of the external field obtain the velocity  $g$ . The formulae for the corresponding acceleration are given here. Terms for the volume density and for  $N(x, y)$  follow. The isophotic lines computed here are circles the centre of which is identical with the photometric centre of the comet. The nonsteady distribution found here deviates only little from the steady one and the difference is below the measuring accuracy which can be reached today. At a certain moment  $t = T$  let it be assumed that a photoionization occurs in the

Card 2/3

AUTHOR: Mokhnach, D. O. 20-118-5-12/59

TITLE: Formation of Gaseous Tails in Comets  
(Formirovaniye gazovogo khvosta komet)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 118, Nr 5,  
pp. 891-894 (USSR)

ABSTRACT: The author in two preliminary works (Ref 1 and 2) gave  
the following equations for the motion of the molecules  
which form the atmosphere of the comet:  
$$x = f_1(\alpha, \varphi, t), y = f_2(\alpha, \varphi, t), z = f_3(\alpha, \varphi, t).$$
$$x, y, z, \text{ here denote the cometocentric rectangular}$$
$$\text{coordinates; } \alpha \text{ and } \varphi \text{ determine the flying directions and } t$$
$$\text{denotes time. A formula is given for the computation of}$$
$$\text{the volume density } \rho. \text{ If } \rho \text{ is known, the visible density can}$$
$$\text{be computed by means of the formulae}$$
$$N(x, y) = \int_{z_1}^{z_2} \rho dz \text{ or } N(x, y) = 2 \int_{t_1}^{t_2} \rho dt \quad (\rho_1 = \rho dz/dt).$$

Card 1/3

3(1)

SOV/33-35-4-9/25

AUTHOR: Mokhnach, D.O.

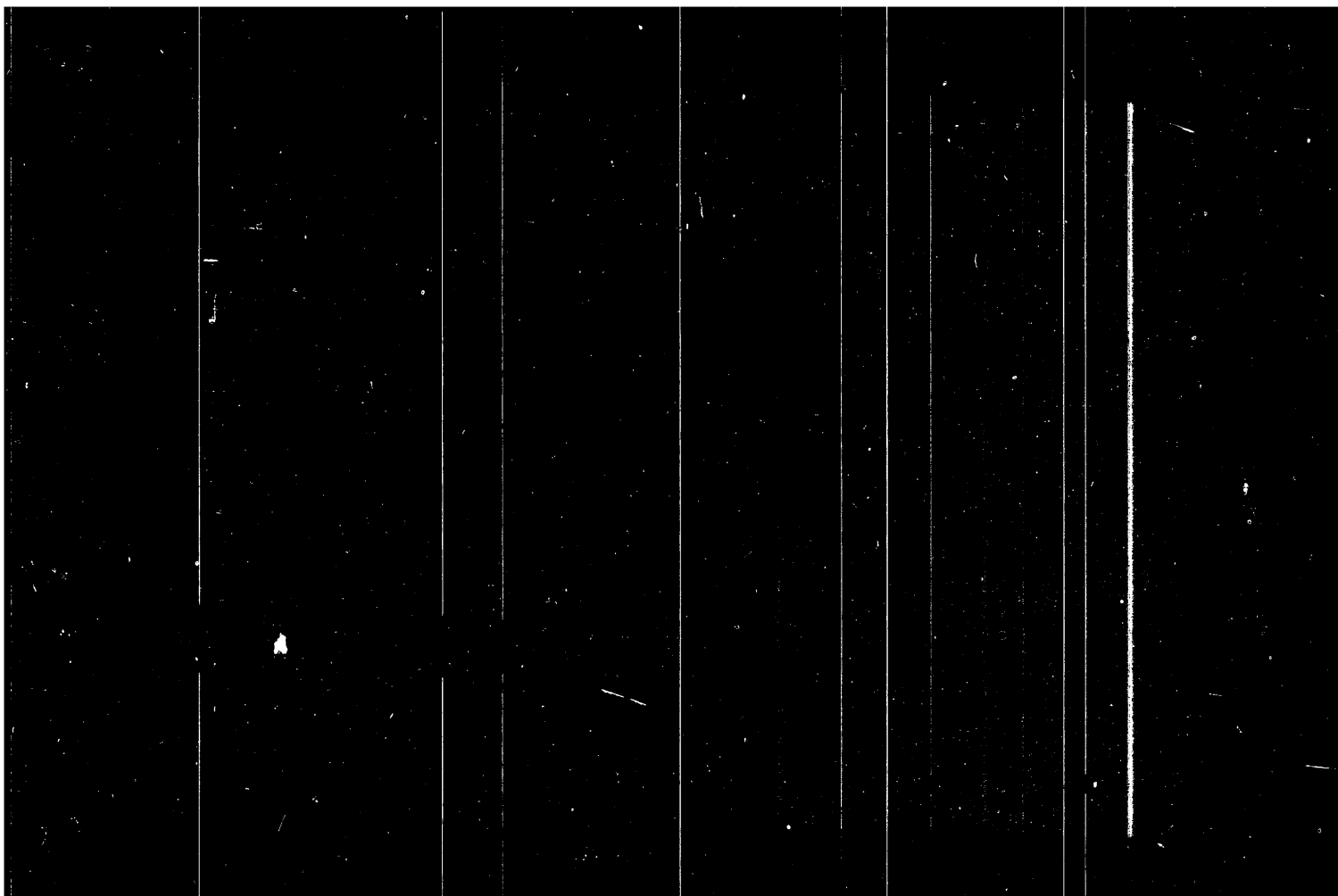
TITLE: Some Remarks on the Nonstationary Distribution of the Apparent Density in Comets (O nestatsionarnom raspredelenii vidimoy plotnosti v kometakh)

PERIODICAL: Astronomicheskii zhurnal, 1958, Vol 35, Nr 4, pp 605-617 (USSR)

ABSTRACT: The author derives expressions for the apparent density in the head of a comet in different times after the beginning of isotropic emission in the following three cases: 1) Absence of external forces; 2) Presence of a uniform field of repulsive forces; 3) Presence of a uniform field of external forces with a subsequent photoionization of molecules. It turns out that it is in general  $N(x,y) \sim r^{-1}$ ; see also B.A. Vorontsov-Vel'yaminov [Ref 2]. The theoretical results are discussed in their relationship with the present possibilities in the exactness of observations. The formation of a gas tail is possible only in the case 3) mentioned above. The author takes the comet 1942g as an example; he gives physical data of the comet which are in coincidence with the observations. Finally some remarks on the determination of the physical data of comets are presented. The author thanks

Card 1/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900008-6



APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900008-6

GOFMAN, Yu.V.; DOBRIKOV, V.N.; ZAIKA, N.I.; MOKHNACH, A.V.; NEMETS, O.F.

Measurement of asymmetry in the  $N^{14}(d,p)N^{15}$  reaction on  
elastically scattered deuterons. Zhur. eksp. i teor. fiz.  
45 no.5:1317-1318 N '63. (MIRA 17:1)

1. Institut fiziki AN UkrSSR.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900008-6

SECRET

REF ID: A66666

REF ID: A66666 / 20 / SUBM DATE: 26Aug64 / ORIG REF: 002

1. NaI(Tl) crystals 1/25/65/1/2/2/2/2 12716 20/00/00  
 SOURCE CODE: 08/6344/65/003/006/0573/0575

AUTHORS: Shcherbakov, E. S.; Khabir, Ye. P.; Mostafina, R. Kh.

DATE: None

TITLE: The effect of anion admixtures appearing during the growth of NaI(Tl) single crystals on their luminescent and scintillation properties

SOURCE: Zhurnal prikladnoy spektroskopii, v. 3, no. 6, 1965, 573-575

TOPIC TAGS: scintillator, scintillation, crystal phosphor, sodium compound

ABSTRACT: <sup>11 17</sup>Admixtures of NaI(Tl) crystals can considerably worsen their scintillation characteristics. Consequently, the authors 1) studied by infrared transmission spectrum 2) in thick NaI(Tl) crystals and found that they contain NaOH, NaIO<sub>3</sub>, and Na<sub>2</sub>CO<sub>3</sub> impurities; 3) established the curves of luminescence increase for samples grown in hermetically sealed containers and those in contact with air; and 4) determined the light yield and resolving power of the two types of crystals. An analysis of the results showed that the reduction to a minimum of anion admixtures increased the scintillation yield by a factor of two and improved the resolving power by 3-7%. Authors thank A. N. Panova and L. G. Sydel'man for their guidance. Orig. art. has: 4 formulas, 3 figures, and 1 table.

Page 1/2

UDC: 535.37

40  
B

ACCESSION NR: AR4040813

point of view of spectrometric properties, distribution of scintillation effectiveness can be obtained by growing single crystals according to the Stockbarger method under conditions of convection mixing of melt. It was determined that in process of high-temperature annealing there occurs redistribution of relative luminescence yield in volume of crystals, which leads to lowering of the spectrometric properties.

SUB CODE: OP, SS

ENCL: 00

Card 2/2

ACCESSION NR: AR4040813

S/0058/64/000/005/A038/A039

SOURCE: Ref. zh. Fizika, Abs. 5A316

AUTHOR: Dobrovinskaya, Ye. R.; Mokhir, Ye. P.; Eydel'man, L. G.

TITLE: Investigation of factors affecting the energy resolution of scintillation counters with NaI(Tl) crystal

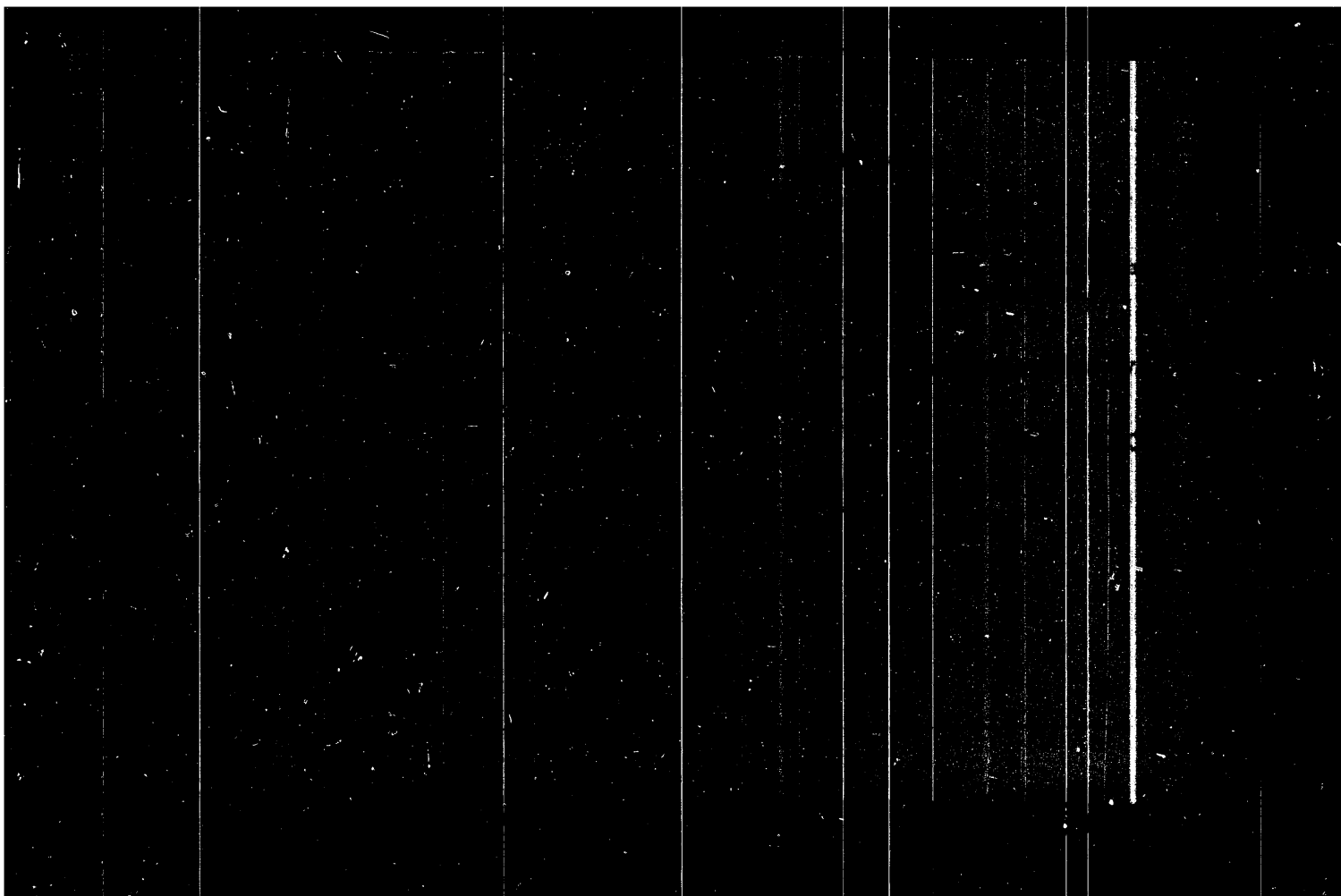
CITED SOURCE: Sb. Stsintillyatory\* i stsintillyats. materialy\*. Khar'kov, Khar'kovsk. un-t, 1963, 90-94

TOPIC TAGS: scintillation counter, single crystal, energy resolution, activator

TRANSLATION: The dependence of the spectrometric properties of a scintillation counter on the distribution of activator in a NaI(Tl) single crystal was experimentally investigated. The influence of high-temperature annealing of crystal on the energy resolution was also studied. It is shown that for improvement of resolving power it is necessary to have in the NaI(Tl) crystal nonuniform distribution of concentration of activator, ensuring increase of scintillation effectiveness with distance from the photocathode of the photoelectric multiplier. Optimum, from the

Card 1/2

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ACCESSION NR: AP4043488

solution of titanium and manganese sulfides. The effect of heating steel at 1220-1270C for 2-4 hrs. with subsequent slow or rapid cooling is discussed in relation to the free energy of formation of TiC, TiS, TiN, TiS<sub>2</sub> and TiO<sub>2</sub>. Slow cooling is found to increase the amount of complex inclusions and favor movement of titanium sulfide to the grain boundaries, resulting in the appearance of specific defects. Photomicrographs of such inclusions are presented. Orig. art. has: 5 figures.

ASSOCIATION: Zlatoustovskiy metallurgicheskiy zavod (Zlatoustovsk Metallurgical Plant); Chelyabinskiy politsehnicheskiy institut (Chelyabinsk Polytechnical Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 006

OTHER: 007

Card 2/2

ACCESSION NR: AP4043488

S/0133/64/000/008/0736/0738

AUTHOR: Mokhir, Ye. D(Engineer); Gurevich, Yu. G. (Candidate of technical sciences)

TITLE: Titanium sulfides in titanium-containing stainless steel

SOURCE: Stal', no. 8, 1964, 736-738

TOPIC TAGS: steel, stainless steel, titanium steel, titanium sulfide, austenite, grain boundary

ABSTRACT: In a discussion of reactions between titanium and sulfur and the formation of sulfide inclusions in titanium-containing stainless steel 18-8, the authors present the results of a metallographic examination of the steel and draw the following conclusions: 1. three types of titanium sulfide inclusions occur in steel, differing in color, properties and, probably, chemical composition; 2. the silvery-pink to dark-pink, highly reflective and readily polished inclusions with a hardness of 180-200 H<sub>v</sub>, which are anisotropic in polarized light, are most probably titanium sulfides; 2. the larger, more convex, greyish-pink to bluish-pink inclusions with a hardness of 200-250 Hv should be identified as a multi-phase combination of titanium sulfides and carbides with carbonitrides; 4. the grey-colored isotropic inclusions found rarely in faulty sample areas may consist of a sulfide

Card 1/2

ACC NR: AP6033655

SOURCE CODE: UR/0133/66/000/011/1041/1044

AUTHOR: Chistyakov, S. L.; Mokhir, Ye. D.; Filatov, S. K.ORG: Zlatoustov metallurgical plant (Zlatoustovskiy metallurgicheskiy zavod)TITLE: Effect of cerium on the structure and properties of OKh23N18 steel  
27 19

SOURCE: Stal', no. 11, 1966, 1041-44

TOPIC TAGS: <sup>CERIUM</sup>oxidation resistant steel, stainless steel, chromium nickel steel, cerium containing steel, steel structure, steel property/  
OKh23N18 stainless steel

ABSTRACT: Several heats of OKh23N18 stainless steel were melted in a 10-ton basic arc furnace, with ferrocerium added as the finishing period, and cast into 2.7-ton ingots. It was found that the presence of cerium in the solid solution affects the diffusional processes taking place in steel during its crystallization and thus helps to reduce dendritic nonuniformity. This in turn results in a more uniform structure which makes it possible to expand the hot-working temperature range without danger of cracking. Orig. art. has: 6 figures.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 005  
Card 1/1 UDC: 669.15-194

ACC NR: AP6035655

SOURCE CODE: UR/0133/66/000/011/1041/1044

AUTHOR: Chistyakov, S. L.; Mokhir, Ye. D.; Filatov, S. K.

ORG: Zlatoustov metallurgical plant (Zlatoustovskiy metallurgicheskiy zavod)

TITLE: Effect of cerium on the structure and properties of OKh23N18 steel

SOURCE: Stal', no. 11, 1966, 1041-44

TOPIC TAGS: <sup>CERIUM</sup>oxidation resistant steel, stainless steel, chromium nickel steel, cerium containing steel, steel structure, steel property/OKh23N18 stainless steel

ABSTRACT: Several heats of OKh23N18 stainless steel were melted in a 10-ton basic arc furnace, with ferrocerium added as the finishing period and cast into 2.7-ton ingots. It was found that the presence of cerium in the solid solution affects the diffusional processes taking place in steel during its crystallization and thus helps to reduce dendritic nonuniformity. This in turn results in a more uniform structure which makes it possible to expand the hot-working temperature range without danger of cracking. Orig. art. has: 6 figures.

SUB CODE: 11/  
Card 1/1

SUBM DATE: none/ ORIG REF: 005

UDC: 669.15-194

TRAKHIMOVICH, V.I., inzh.; CHISTYAKOV, S.L., inzh.; MOKHIR, Ye.D., inzh.;  
FILATOV, S.K., inzh.; YAKOBSON, V.Z., inzh.

Improving the technology of the production of OKh23N18 and  
Kh23N18 steels. Stal' 25 no.12:1092-1094 D '65.

(MIRA 18:12)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy  
metallurgii imeni I.P. Bardina i Zlatoustovskiy metallurgicheskiy  
zavod.

L 45976-66

ACC NR: AR6028429

austenite and in their precipitation from solution on slow cooling. The segregation area in blanks can be eliminated by heat treatment of the steel: heating the metal to 1200—1250C, holding for 2—3 hr at this temperature, and subsequent quick cooling in water. D. Kashayeva. Orig. art. has: 1 figure and 2 tables. Bibliography of 11 titles. [Translation of abstract] [NT]

SUB CODE: 11/

Card 2/2

JS

L 45976-66 EWT(m)/EWP(t)/ETI IJP(c) JD  
 ACC NR: AR6028429 SOURCE CODE: UR/0137/66/000/005/V051/V051

AUTHOR: Gurevich, Yu. G. ; Mokhir, Ye. D.

TITLE: Nature of the segregation area in stainless steel / 6

SOURCE: Ref. zh. Metallurgiya, Abs. 5V324

REF SOURCE: Tr. Chelyab. politekhn. in-ta, vyp. 28, 1965, 20-25

TOPIC TAGS: stainless steel, metal etching, segregation, segregation area, etching

ABSTRACT: For solution to the problem of the nature of segregation of the area of increased etching in stainless steel, the distribution of titanium sulfides has been investigated by metallographic analysis along the cross section of rolled blanks. The results of the investigation show that in the range of increased etching there is a microliquation of sulfur carbon<sup>2</sup> and titanium in the form of sulfides ✓ 7 and titanium carbosulfides. In connection with this, the square of increased etching appears to be the segregation area. The formation mechanism of the latter is associated with a change in the solubility of sulfides and titanium carbosulfides in

Card 1/2

UDC: 669.18-412:621.746.753

MOKHIR, Ye.L., inzh.; GOREVICH, Yu.G., kand. tekh. nauk

Titanium sulphides in stainless, titanium-containing steel,  
Stal' 24 no.8:736-738 Ag '64. (Mokh: 17)

1. Zlatoustovskiy metallurgicheskiy zavod i Chelyabinskii  
politehnicheskiy institut.

MOKHIR, Ye.D.

Aluminosilicate inclusions in steel. 3bor. trad. TSNIIICM no.32:  
81-90 '63. (MIRA 16:12)

MOKHIR, Ye.D.; CHEKHOMOV, O.M.

Composition of nonmetallic inclusions in converter steel treated  
by liquid synthetic slag. Stal' 22 no.7:640-643 Л '62.  
(MIRA 19:7)

(Steel—Inclusions)

VOINOV, S.G.; KOSOY, L.F.; SHUMOV, M.M.; SHALIMOV, A.G.; CHEKHOMOV, O.M.;  
ANDREYEV, T.B.; AFANAS'YEV, S.G.; KALINNIKOV, Ye.S.; Primali  
uchastiye: KORNEYENKOV, A.N.; GURSKIY, G.V.; BOKSHITSKIY, Ya.M.;  
PETROV, A.K.; MOKHIR, Ye.D.; KOLYASNIKOVA, R.I.; KHASIN, G.A.;  
DANILIN, V.P.; PLEKHANOV, P.S.; MAZUN, A.I.; MARKIN, A.A.

Refining converter steel in the ladle with liquid synthetic slag.  
Stal' 22 no.3:226-232 Mr '62. (MIRA 15:3)  
(Steel--Metallurgy)

The formation of titanium ...

S/148/61/000/004/005/008  
E071/E480

titanium nitrides formed in the liquid steel serve as nuclei for titanium carbides during the crystallization of ingots. On the subsequent interaction of these two phases, titanium carbonitrides of variable composition are formed. On heating and cooling of the steel during rolling, titanium nitrides and carbides can be transformed into carbonitrides. During this transformation, well dispersed fine nitride inclusions form coarser carbonitrides which increase the degree of contamination of the steel by non-metallic inclusions. In order to decrease the amount of titanium carbonitride inclusions in steel, slow cooling after rolling should be prevented. There are 3 figures, 3 tables and 6 references: 4 Soviet and 2 non-Soviet. The two references to English language publications read as follows:

Ref.2: A.M.Pottevin and R.Castrol. J. Iron and Steel Institute, p.1, 1937, 223.

Ref.5: A.G.Guy. Transactions of the A.S.M., 1952, 382.

ASSOCIATIONS: Chelyabinskiy politekhnicheskii institut (Chelyabinsk Polytechnical Institute); Zlatoustovskiy metallurgicheskii zavod (Zlatoust Metallurgical Works)

SUBMITTED: May 4, 1960  
Card 2/2

S/148/61/000/004/005/008  
E071/E480

**AUTHORS:** Gurevich, Yu.G. and Mokhir, Ye.D.  
**TITLE:** The formation of titanium carbonitrides in steel  
**PERIODICAL:** Izvestiya vysshikh uchebnykh zavedeniy, Chernaya metallurgiya, no.4, 1961, 107-113

**TEXT:** It appears that titanium carbonitrides observed in specimens of cast and particularly rolled steel are most likely formed during the cooling of ingots and during its heating and cooling in the rolling process. This work was carried out in order to study the process of titanium carbonitride formation in solid steel 1X18W19T (1Kh18N9T), smelted under the normal conditions of the Zlatoust Works. The study was done on specimens of steel taken from the usual heats and on specimens of the same steel but with synthetic titanium carbides and nitrides of a stoichiometric composition artificially introduced into the steel. The samples of steel were cast into 3 kg ingots, cooled in water and after various thermal treatments the metal was investigated by chemical, metallographic, petrographic and X-ray methods. On the basis of the experimental results obtained, it is deduced that

Card 1/2

ANTROPOV, O.F., insh.; GUREVICH, Yu.G., insh.; MOKHIR, Ye.D., insh.

Effect of vacuum refining on steel properties. Izv. vys. ucheb.  
sav.; Chern. met. no.12:17-20 D '58. (MIRA 12:3)

1. Zlatoustevskiy metallurgicheskiy savod i Chelyabinskii  
politekhnikheskiy institut.  
(Vacuum metallurgy) (Steel--Testing)

SOV/133-58-8-19/30

**The Influence of the Order of Alloying Additions on the Quality of Steels Containing Aluminium**

concluded that nitride forming elements play a considerable part in the appearance of layered fracture. In the usual practice, vanadium in the form of 40% ferrovanadium is added 30-40 minutes before tapping, i.e. before the addition of aluminium. Experimental heats were made in which vanadium was introduced after the addition of aluminium by two methods: a) into the furnace 5-10 min before tapping and b) into the ladle when the metal temperature was 1 570 - 1 600 °C (the first portions of metal were tapped without slag). A marked improvement in the structure of the fracture of hardened specimens was obtained (Figure 3). Thus, the method by which vanadium is added to the aluminium alloyed steel has a considerable influence on its quality. It is concluded that the work should be continued. There are 3 figures and 6 Soviets refs.

**ASSOCIATION:** Zlatoustovskiy metallurgicheskiy zavod (Zlatoust Metallurgical Works)

Card 3/3    1. Aluminum-steel alloys--Production    2. Aluminum-steel alloys  
--Properties

SOV/133-58-8-19/30

The Influence of the Order of Alloying Additions on the Quality  
of Steels Containing Aluminium

test vessel was not boiling and contained not less than 0.15% Si. The refining slag should be carefully removed in order to prevent reduction reaction between silica and aluminium. Aluminium is added on the clear surface of the metal 30 minutes before tapping. When smelting the above steels in the manner indicated, the proportion of rejects due to spot liquation decreased to 5.5% and due to layer fracture to zero; the volume of metal lost in dressing decreased 2.5 times; the total loss of metal due to the above mentioned defects decreased to 3%. Steel 38KhVYu - this steel (C 0.35-0.42, Mn  $\leq$  0.40, Si 0.15-0.3%, Cr 1.5-1.8, Ni  $\leq$  0.30, W 0.20-0.40, V 0.1-0.2, Al 0.4-0.7, P  $\leq$  0.03, S  $\leq$  0.035%) is being produced as a replacement for steel 38KhYuA. Even when the technology of production is strictly maintained, the fracture of all hardened specimens from rods 90 mm diameter shows a coarse layered structure (Figures 1 and 2). Investigations indicated that on the surface of the layered fracture, there is a higher concentration of aluminium, vanadium and nitrogen than on the surface of a normal fracture. It was therefore

Card 2/3

**AUTHORS:** Petrov, A.K., Petrov, V.K. and <sup>SOV/135-58-8-19/30</sup> ~~38KhU~~, Ye.D.

**TITLE:** The Influence of the Order of Alloying Additions on the Quality of Steels Containing Aluminium (Vliyaniye poriyadke prisadki legiruyushchikh na kachestvo staley s alyuminiyem)

**PERIODICAL:** Stal', 1958, Nr 8, pp 742 - 744 (USSR)

**ABSTRACT:** The influence of the order of adding alloying additions to steels alloyed with aluminium on the formation of specific defects for aluminium alloyed steels was investigated. Steels 38KhMYuA and 38KhYuA produced with additions of aluminium to the ladle are seldom obtained with a required quality. 86% of open-hearth metal and 61% of metal from electric furnaces is defective due to spot liquation and layered fracture of hardened specimens is encountered in over 16% of the heats. On the basis of an investigation, a new technology of production of these steels was developed. Main points: boiling of metal should be carried out at a velocity of decarburisation 0.35 - 0.50% C/hr with a good renewal of slag in order to obtain an intensive de-gassing and de-sulphurisation of the steel. During refining, slag is deoxidised at first with dry coke breeze and then with ferrosilicon or silico-calcium to such an extent that before the removal of the refining slag, the metal in the

Card 1/3

Comparison of Methods of Smelting Steel 18KhNVA in Arc Furnaces <sup>133-58-4-13/41</sup>  
satisfactory and is not worse than when the metal is  
produced by other methods.  
There are 4 tables and 3 figures.

ASSOCIATION: Zlatoustovskiy metallurgicheskiy zavod  
(Zlatoust Metallurgical Works)

- |                      |                                     |
|----------------------|-------------------------------------|
| 1. Steel--Production | 2. Electric furnaces--Effectiveness |
| 3. Slags--Properties | 4. Steel--Mechanical properties     |

Card 5/5

Comparison of Methods of Smelting Steel 18KhNVA 133-58-4-13/40  
in Arc Furnaces

of fractures the presence of "platforms" was observed. These were previously found to be due to the accumulation of nitrides and oxides of titanium. During the crystallisation of ingots a part of these non-metallic inclusions, precipitates in the form of comparatively coarse films along the grain boundaries. After rolling these films become elongated along the axis of rolling sectors (in fracture - "platforms"), which form weak spots in the metal. The percentage of heats in which "platforms" were found for all four types of smelting practices was: 1) 44%; 2) 27.2%; 3) 9.1% and 4) 0%. Mechanical properties were checked on longitudinal and transverse specimens. The results are shown in Figs. 1, 2 and Table 1. Non-metallic inclusions - Table 2, Fig. 3; mean chemical composition of non-metallic inclusions - Table 3. Investigation of the tendency to growth of austenitic grains indicated that in this respect the smelting practice has no influence. Technico-economical indices of the individual smelting practices are given in Table 4. It is concluded that the most economical method of smelting 18KhNVA steel is the melting of alloyed scrap with blowing the bath with oxygen. The quality of metal is

Card  
4/5

Comparison of Methods of Smelting Steel 18KhNVA 133-58-4-13/40  
in Arc Furnaces

oxidising period was lowered to 0.09-0.12%. At the beginning of the reducing period the slag was treated with coke powder then with ferrosilicon. In the middle of the refining period after the introduction of ferrochromium an addition of alloy AMS (3kg/t) was made. Before tapping ferrotitanium (0.01% Ti) and aluminium (0.5 kg/t) were added. The finished metal in all experimental heats contained 0.14-0.17% C. The metal was bottom poured in 2.7 ton ingots. Metal from all heats was rolled into rounds and squares 110-125 mm. In order to evaluate the quality of the metal from one ingot from each heat three samples were taken: A, B and X. A and X 400 mm long from the top and bottom parts respectively and B, 1500 mm long - from the middle part of the rolled ingot. The investigation of the macrostructure, fracture and non-metallic inclusions was carried out on specimens cut out from A, B and X. For other tests, specimens were cut from B. The macrostructure of metal from all heats was found to be satisfactory. Fracture: this was investigated after two kinds of heat treatment: after hardening from 860°C and after the same hardening and annealing at 550. On a number

Card  
3/5

133-58-4-13/40  
Comparison of Methods of Smelting Steel 18KhNVA in Arc Furnaces

ferrosilicon. Before tapping ferrotitanium (0.06% of Ti) and aluminium (0.3 kg/t) were introduced.

2) Using "boiling" soft iron. The charge consisted of 60-65% of scrap of the same metal, blooms of boiling soft iron (0.04-0.06C), nickel and ferromanganese. Slag-lumps of limestone and chamotte (2:1) in the amount of 4% of weight of the metal. The reducing period as in the usual practice.

3) Smelting of scrap with blowing with oxygen. Charge: 60% of scrap of the same metal, 5-8% of high alloy scrap and carbon scrap, if necessary nickel was added. Carbon content after melt out 0.25-0.35%. After melt out the bath was blown with oxygen for 10-15 mins, then the melting slag was removed and refining slag put on. The reducing period as in the usual practice. Before tapping ferrotitanium (0.10% Ti) and aluminium (0.5 kg/t) were added.

4) Smelting with oxidation. The charge was made from scrap of the same steel (up to 15%), pig iron (7-8%), scrap of carbon steel and necessary amount of nickel. After the melt out, the oxidation period was carried out during which, due to ore additions, not less than 0.50% of carbon was removed. The carbon content at the end of the

Card 2/5

AUTHORS: Petrov, V. K., Kopeykin, A. P. and Mokhir, Ye. D.,<sup>133-58-4-13/40</sup>  
Engineers

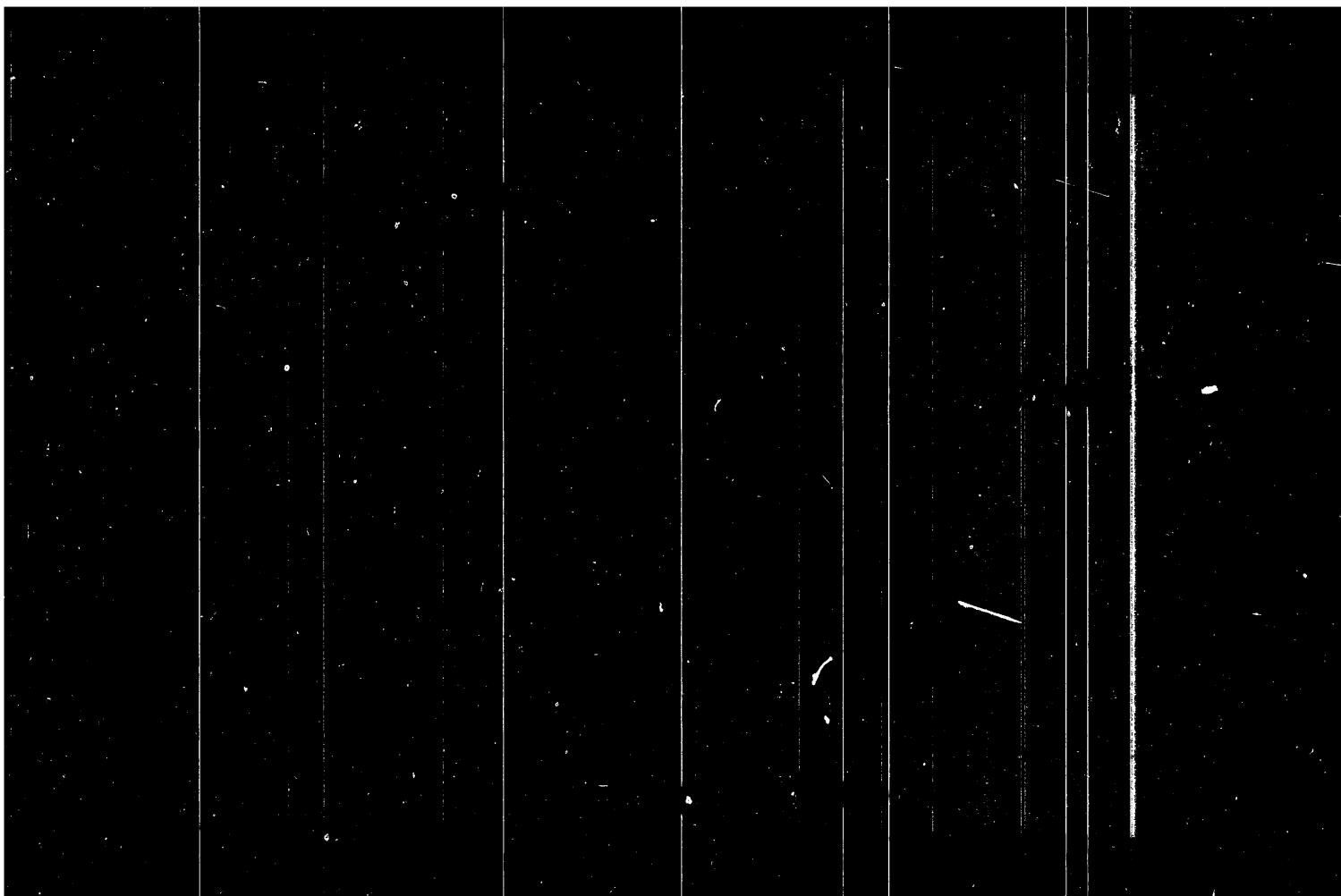
TITLE: Comparison of Methods of Smelting Steel 18KhNVA in  
Arc Furnaces (Sravneniye metodov vyplavki stali 18KhNVA  
v dugovykh pechakh)

PERIODICAL: Stal', 1958, Nr 4, pp 326-330 (USSR)

ABSTRACT: In view of the introduction of the application of oxygen  
in electrosmelting it was necessary to compare the quality  
and economical indices of various methods of production  
of structural steel 18KhNVA in 10-ton arc furnaces. The  
following methods of production were compared:  
1) The usual method. The charge consisted of 45-50% of  
scrap of the same steel, soft iron and nickel. Before  
charging metal low melting slag consisting of equal  
amounts of lime, fluorspar and chamotte (1.5% of weight  
of the metal) was placed on the bottom of the furnace.  
During melting a similar portion of slag was added under  
electrodes. After the melt out and checking the chemical  
composition the melting slag was removed and refining  
slag put on. The latter was treated during the first  
30-40 minutes with coke and then with a powder of 75%

Card 1/5

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900008-6



APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900008-6

30228

On factors influencing the ...

S/185/61/006/005/004/019  
274/D303

ASSOCIATION: Vsesoyuznyy naukovy-doslidnyy instytut khimichnykh  
reaktiviv Kharkivs'kyi filial (All-Union Scientific  
Research Institute of Chemical Reagents, Kharkiv  
Branch)

SUBMITTED: October 31, 1960

Card 4/4

Card 2/4

On factors influencing the ...

30328  
S/185/61/006/005/004/019  
D274/D303

The nature of the treatment of the reflecting surfaces influences, too, the scintillation efficiency. Thus, unpolished crystal-surfaces lead to a greater spread of light output than polished surfaces. Hence the optimum activator-concentration ought to be greater in crystals with unpolished surfaces than in polished ones. As the growing of the single-crystals involves high-temperature annealing, the influence of the latter was investigated. It was found that the annealing (at 630-640°C) led to a decrease in the resolving power (by 4 - 5 %). It is concluded that optimum scintillation efficiency can be achieved by growing the single crystals by Stockbarger's method. High-temperature annealing leads to a redistribution of light output, hence to a deterioration of spectrometric properties. There are 4 figures and 11 references: 7 Soviet bloc and 4 non-Soviet-bloc. The references to the English-language publications read as follows: A. Harshow, U.C. Kremers, E.C. Stewart, E.K. Warburton, I.O. Hay, Atomic Energy Commission Report NYO 1977, 1952; Donal C. Stockbarger, Rev. Sci. Instr., 7, 133, 1936; W.G. Pfann, Trans. Am. Inst. Mining Met. Engrs., 194, 747, 1952.

Card 3/4

30328

9.6150  
21.6000

S/185/61/006/005/004/019  
D274/D303

AUTHORS: Dobrovins'ka, O.R., Mokhir, O.P., and Eydel'man, L.H.

TITLE: On factors influencing the resolving power of a NaI(Tl) scintillation-counter

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 6, no. 5, 1961,  
608 - 612

TEXT: The dependence of spectrometric properties of a scintillation counter (with NaI(Tl) single crystals) on activator distribution was experimentally studied. A theoretical investigation of the distribution of the coefficient of light-collection, showed that optimum resolving power can be achieved by irregular distribution of the activator along the crystal; thereby the decrease in light collection is compensated by increasing scintillation efficiency; (Ref. 6: L.S. Kukushkin, A.M. Ratner, ZhTF, 28, 345, 1961) (Ref. 7: ZhTF, 28, 1121, 1958). The present study experimentally confirmed the above conclusion. The NaI(Tl) single-crystals were grown by Stockbarger's method (Ref. 8: Rev. Sci. Instr., 7, 133, 1936). The dependence of the resolving power on the spread of the Card 1/4

UNKOVSKIY, B.V.; BELYANIN, V.B.; MOKHIR, I.A.; URINOVICH, Ye.M.

Stereochemistry of acetylenic synthesis. Part 3: Space configuration of geometrical isomers of 1,2,5-trimethyl-4-ethynyl-4-piperidol and their derivatives. Zhur. ob. khim. 33 no.8:2540-2548 Ag '63. (MIRA 16:11)

1. Moskovskiy institut tonkey khimicheskoy tekhnologii imeni M.V. Lomonosova.

BELIANIN, V.B.; UNKOVSKIY, B.V.; MOKHIR, I.A.

Stereochemistry of acetylenic synthesis. Part 2: Absorption spectra and space configuration of geometrical isomers of 1,3-dimethyl-4-acetyl-4-piperidol. Zhur. ob. khim. 33 no.8: 2534-2540 Ag '63. (MIRA 16:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. Lomonosova.

UNKOVSKIY, B.V.; MORHIR, I.A.; URINOVICH, Ye.M.

Stereochemistry of acetylenic synthesis. Part 1: Space configuration of geometrical isomers of 1,3-dimethyl-4-ethynyl-4-piperidol and their derivatives. Zhur.ob.khim. 33 no.6:1808-1816 Je '63.

(MIRA 16:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

(Piperidinol) (Stereochemistry)

UNKOVSKIY, B.V.; MOKHIR, I.A.,

Synthesis of geometric isomers of 1,2,5-trimethyl-aryl-4-piperidylmethyl- and 1,2,5-trimethyl-4-aryl-4-piperidylaryl ketones.  
Zhur. ob. khim. 31 no. 11:3577-3538 N '61. (MIRA 14:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im.  
M.V. Lomonosova.

(Ketones) (Isomers)

UNKOVSKIY, B.V.; MOKHIR, I.A.; BATRAKOV, S.G.

Synthesis of geometric isomers of 1,2,5-trimethyl-4-hydroxy-4-piperidyl- and 1,2,5-trimethyl-4-hydroxy-4-piperidylarylcarbinols.  
Zhur. ob. khim. 31 no. 11:3571-3577 N '61. (MIRA 14:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.

(Methanol) (Isomers)

SHVETSOV, N.I.; UNKOVSKIY, B.V.; MOKHIR, I.A.; KUCHEROV, V.F.

Stereochemistry of heterocyclic compounds. Report No.5: Possible configuration of 1, 2, 5-trimethyl-4-ethynyl-4-piperidinol stereoisomers and their transformation products. Izv.AN SSSR.Otd.khim.nauk no.5: 843-849 My '61. (MIRA 14:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR i Institut tonkoy khimicheskoy tekhnologii im. M.V.Lomonosova. (Piperidinol)

UMKOVSKIY, B.V.; GUSAKOVA, G.S.; MONHIR, I.A.

Esters of 1,3-dimethyl- and 1,2,3-trimethyl-4-carbomethoxy-4-piperidinols. New analogues of  $\alpha$ -cocaine and  $\alpha$ -eucaine. Zhur. ob. khim. 30 no.12:3926-3931 D '60. (MIRA 13:12)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii.  
(Cocaine) (Eucaine)

Synthetic Anesthetics. Esters of Stereo-  
isomeric 1,2,5-Trimethyl-4-Ethynyl-,  
1,2,5-Trimethyl-4-Ethyl-, and 1,2,5-Tri-  
methyl-4-Acetyl-4-Piperidinols

78252

SOV/79-30-3-4/43

Key to Table 1. (a) Esters of 1,2,5-trimethyl-4-ethynyl-,  
1,2,5-trimethyl-4-ethyl-, and 1,2,5-trimethyl-4-acetyl-  
-4-piperidinols; (b) nr of the compound in the text;  
(c) isomer; (d) melting temperature; (e) yield.

ASSOCIATION: Moscow Institute of Fine Chemicals Technology  
(Moskovskiy institut tonkoy khimicheskoy tekhnologii)

SUBMITTED: February 24, 1959

Card 5/5

(Caption to Table 1 on Card 5/5)

78292 30V/P(130-3-6/10)

Table 1.

$\alpha$	R	$\Delta T$	$\delta$	$\epsilon$	$t$	$\eta$
(VII)	CH <sub>3</sub> C	C <sub>6</sub> H <sub>5</sub>	1	203-209	65	
(IX)	CH <sub>3</sub> C	C <sub>6</sub> H <sub>5</sub> CH <sub>2</sub>	1	208-209	69.7	
(X)	CH <sub>3</sub> C	C <sub>6</sub> H <sub>5</sub> CH <sub>2</sub>	1	199-200	60	
(XI)	CH <sub>3</sub> C	C <sub>6</sub> H <sub>5</sub> OCH <sub>2</sub>	1	210-211	60	
(XII)	CH <sub>3</sub> C	C <sub>6</sub> H <sub>5</sub> CH=CH	1	208-209	67.5	
(XIII)	CH <sub>3</sub> C	C <sub>6</sub> H <sub>5</sub> CH=CH	1	205-207	72	
(XIV)	CH <sub>3</sub> C	C <sub>6</sub> H <sub>5</sub> CH <sub>2</sub> CH <sub>2</sub>	1	143-144	60	
(XV)	CH <sub>3</sub> C	<i>n</i> -NO <sub>2</sub> C <sub>6</sub> H <sub>4</sub>	1	202-203	50	
(XVI)	CH <sub>3</sub> C	<i>n</i> -NO <sub>2</sub> C <sub>6</sub> H <sub>4</sub>	1	214-215	62	
(XVII)	C <sub>2</sub> H <sub>5</sub>	C <sub>6</sub> H <sub>5</sub> CH <sub>2</sub> CH <sub>2</sub>	1	112-113	77	
(XVIII)	C <sub>2</sub> H <sub>5</sub>	C <sub>6</sub> H <sub>5</sub> CH <sub>2</sub> CH <sub>2</sub>	1	131-135	68	
(XIX)	C <sub>2</sub> H <sub>5</sub>	<i>n</i> -NH <sub>2</sub> C <sub>6</sub> H <sub>4</sub>	1	141.5-143	63.4	
(XX)	C <sub>2</sub> H <sub>5</sub>	<i>n</i> -NH <sub>2</sub> C <sub>6</sub> H <sub>4</sub>	1	122-123	75.4	
(XXI)	CH <sub>3</sub> CO	CH <sub>3</sub>	1	55-56	88	
(XXII)	CH <sub>3</sub> CO	CH <sub>3</sub>	1	124-125 (mixture)	94	
(XXIII)	CH <sub>3</sub> CO	C <sub>6</sub> H <sub>5</sub> OCH <sub>2</sub>	1	177-179	50	
(XXIV)	CH <sub>3</sub> CO	C <sub>6</sub> H <sub>5</sub> OCH <sub>2</sub>	1	180-181	56	
(XXV)	CH <sub>3</sub> CO	C <sub>6</sub> H <sub>5</sub> CH=CH	1	160-161	98	
(XXVI)	CH <sub>3</sub> CO	C <sub>6</sub> H <sub>5</sub> CH=CH	1	200-201	95.2	
(XXVII)	CH <sub>3</sub> CO	<i>n</i> -NO <sub>2</sub> C <sub>6</sub> H <sub>4</sub>	1	205-206	80.2	
(XXVIII)	CH <sub>3</sub> CO	<i>n</i> -NO <sub>2</sub> C <sub>6</sub> H <sub>4</sub>	1	221-222	95	
(XXIX)	CH <sub>3</sub> CO	C <sub>6</sub> H <sub>5</sub> CH <sub>2</sub> CH <sub>2</sub>	1	145-147	84	
(XXX)	CH <sub>3</sub> CO	C <sub>6</sub> H <sub>5</sub> CH <sub>2</sub> CH <sub>2</sub>	1	87-89	84	
(XXXI)	CH <sub>3</sub> CO	<i>n</i> -NH <sub>2</sub> C <sub>6</sub> H <sub>4</sub>	1	132-133	84.5	
(XXXII)	CH <sub>3</sub> CO	<i>n</i> -NH <sub>2</sub> C <sub>6</sub> H <sub>4</sub>	1	184-185	74.5	

Card 4/5

Synthetic Anesthetics. Esters of Steroids -  
 Isomeric 1,2,5-Trimethyl-4-Ethynyl-,  
 1,2,5-Trimethyl-4-Ethyl-, and 1,2,5-Tri-  
 methyl-4-Acetyl-4-Piperidinols

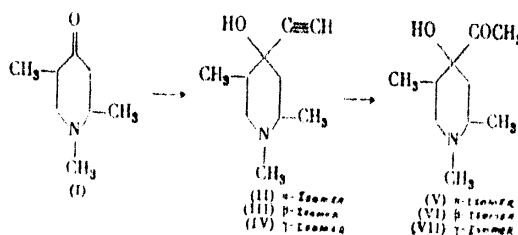
482-2  
 11/11/11-11-11

and XVIII, respectively, over Raney nickel.  
 L. D. Bogatyreva and G. N. Dudnik (Students) partici-  
 pated in the experiments. There is 1 table; and 3  
 references, 1 Swiss, 2 German, 0 Soviet.

Synthetic Anesthetics. Esters of Stereo-  
isomeric 1,2,5-Trimethyl-4-Ethynyl-,  
1,2,5-Trimethyl-4-Ethyl-, and 1,2,5-Tri-  
methyl-4-Acetyl-4-Piperidinols

78252

SOV/19-30-3-5/69



Esters VIII-XVI were obtained on heating III and IV for 1.5-2 hr at 120-170° C with the corresponding acid chlorides. Esters XII, XIII, XV, and XVI on hydrogenation over sponge nickel gave, respectively, the esters XVII, XVIII, XIX, and XX. Heating VI and VII for 5-6 hr in water bath with the corresponding acid chlorides (in excess) in benzene gave the esters XXIII-XXVIII. Esters XXIX, XXX, XXXI, and XXXII were obtained by hydrogenation of esters XXV, XXVI, XXVII,

Card 2/5

5.3610

78252  
SOV/79-30-3-6/69

**AUTHORS:** Nazarov, I. N., Unkovskiy, B. V., Mokhir, I. A.

**TITLE:** Synthetic Anesthetics. Esters of Stereoisomeric 1,2,5-Trimethyl-4-Ethynyl-, 1,2,5-Trimethyl-4-Ethyl-, and 1,2,5-Trimethyl-4-Acetyl-4-Piperidinols

**PERIODICAL:** Zhurnal obshchey khimii, 1960, Vol 30, No 3, pp 742-746 (USSR)

**ABSTRACT:** Some esters of 4-piperidinols show anesthetic properties close to those of dicaine, while being 4-8 times less toxic. 25 esters of isomeric piperidinols named above (analogs of  $\alpha$ - and  $\beta$ -eucaine), were synthesized from the isomeric alcohols III and IV, and from the corresponding ketols VI and VII, described previously (this journal, Vol 29, our abstract 73006 (1959); ibid., Vol 26, p 186 (1956) and readily available in USSR at present.

Card 1/5

MOKHIR, I. A., Cand Chem Sci (diss) -- "The synthesis of piperidine anesthetics and analgesics -- stereoisomeric analogs of ketobemidon and Alpha-eucaine". Moscow, 1960. 21 pp (Min Higher and Inter Spec Educ USSR, Moscow Inst of Fine Chem Tech im M. V. Lomonosov), 150 copies (KL, No 12, 1960, 125)

Synthesis of the Stereoisomeric 1,2,5-Trimethyl-  
-4-carbalkoxy-4-piperidols

SOV/79-29-7-41/83

relationship between anaesthetic effect and spacial structure.  
There are 11 references, 7 of which are Soviet.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii (Moscow  
Institute for Fine Chemical Technology)

SUBMITTED: July 2, 1958

Card 3/3

Synthesis of the Stereoisomeric 1,2,5-Trimethyl-  
-4-carbalkoxy-4-piperidols

SOV/79-29-7-41/83

this procedure always yields  $\alpha$ -oxyacids as main reaction products. The authors ascertained, that the oxidation of aqueous solutions of the hydrochlorides of the stereoisomeric acetylen-alcohols (I)-(III) leads to the corresponding stereoisomeric acids (IV)-(VI) even at low temperatures. Owing to difficult purification, they were precipitated as hydrochlorides and converted into their methyl esters (VII)-(IX). The stereoisomeric oxy-acids (IV) and (VI) which separated during the oxidation of the keto-alcohols (X) and (XII) with NaBrO and their corresponding methyl esters (VII) and (IX) proved identical with the compounds obtained by the oxidation of the acetylene-alcohols (I) and (III) with  $\text{KMnO}_4$ . The two methods described here thus yield three stereoisomer 1,2,5-trimethyl-4-oxy-4-piperidinecarboxylic acids and their oxyesters, which are used as intermediates in the synthesis of new anaesthetics. The possibility of synthesizing 1,2,5-trimethyl-4-carbalkoxy-4-piperidols paves the way both for the synthesis of hitherto unknown analogs of *d*-eucaine and for the determination of the

Card 2/3

5 (3)

**AUTHORS:**

Nazarov, I. N., Unkovskiy, B. V.,  
Mokhir, I. A., Gusakova, G. S.

SCV/79-29-7-41/83

**TITLE:**

Synthesis of the Stereoisomeric 1,2,5-Trimethyl-4-carbalkoxy-  
-4piperidols (Sintez stereizomernykh 1,2,5-trimetil-4-karbal-  
koksi-4-piperidolov)

**PERIODICAL:**

Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, pp 2292-2298  
(USSR)

**ABSTRACT:**

In the present paper the above piperidols and the corresponding oxy-acids are described. As initial product the stereoisomer 1,2,5-trimethyl-4-ethinyl-4-piperidols (I)-(III) were used, which were obtained by the reaction of 1,2,5-trimethyl-4-piperidones with acetylene, and were the subject of the last paper (Ref 5). The advantage of the method chosen lies in the possibility of obtaining three stereoisomeric oxy-acids (IV)-(VI), since the initial acetylene-alcohols (I)-(III) are formed as a mixture of three (of four theoretically possible) stereoisomers and are easily separable. The transition to the  $\alpha$ -oxy-acids of the piperidine-series (IV)-(VI) may also, amongst other methods, take place by oxidation of the acetylene-alcohols (I)-(III) with  $\text{KMnO}_4$ . Several Soviet investigators (Refs 6,7) showed that

Card 1/3

Synthesis of Stereoisomeric 1,2,5-Trimethyl-4-ethynyl- SOV/79-29-6-19/72  
4-piperidols. Stereochemistry of the Acetylene Synthesis

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M. V.  
Lomonosova (Moscow Institute of Fine Chemical Technology imeni  
M. V. Lomonosov)

SUBMITTED: May 29, 1958

Card 3/3

**Synthesis of Stereoisomeric 1,2,5-Trimethyl-4-ethynyl- SOV/79-29-6-19/72  
4-piperidols. Stereochemistry of the Acetylene Synthesis**

with acetylene in alkaline medium in its two stereoisomeric forms (cis- and trans-) which are in tautomeric equilibrium in contrast to the reaction with hydrogen cyanide. The quantitative ratio of the stereoisomeric acetylene alcohols depends on the reaction conditions (pressure, temperature, reaction time) and may be varied according to the judgement of the experimenter. This ratio is considerably changed when increasing excess pressure of acetylene. In the syntheses under pressure the low-melting  $\alpha$ - and the high-melting  $\gamma$ -isomer are predominant in the mixture of the stereoisomeric acetylene alcohols. These isomers correspond with the non-enolized trans-form of 1,2,5-trimethyl-4-piperidone and possess the same steric configuration as the cyanohydrin of 1,2,5-trimethyl-4-piperidone. An interpretation of the dependence of the stereoisomerism of the acetyl alcohols on the reaction conditions is suggested on the basis of the reversibility of the synthesis and of the different dissociation degree of the isomers under the influence of caustic potash. There are 1 table and 13 references 8 of which are Soviet.

Card 2/3

5 (3)

**AUTHORS:**

Nazarov, I. N., Mokhir, I. A.,  
Unkovskiy, B. V., Gusakova, G. S.

SD7/79-29-8-13/72

**TITLE:**

Synthesis of Stereoisomeric 1,2,5-Trimethyl-4-ethinyl-4-piperidols. Stereochemistry of the Acetylene Synthesis (Sintez stereoisomernykh 1,2,5-trimetil-4-etinil-4-piperidolov. Stereokhimiya atsetilenovogo sinteza)

**PERIODICAL:**

Zhurnal obshchey khimii, 1959, Vol 29, Nr 6, pp 1867 - 1874 (USSR)

**ABSTRACT:**

The good accessibility of acetylene alcohols and the possibility of obtaining by them the stereoisomeric analogs of ketobemidone (clyradone) caused the authors to investigate the stereoisomerism of the 4-ethinyl-4-piperidols, already earlier described by them (Refs 3,6) (Scheme 2). In the present paper the synthesis of the stereoisomeric 1,2,5-trimethyl-4-ethinyl-4-piperidols (II) under different conditions and their separation into individual isomers were described. On reaction of 1,2,5-trimethyl-4-piperidone (I) with acetylene in the presence of powdery caustic potash a mixture of three stereoisomeric 1,2,5-trimethyl-4-ethinyl-4-piperidols (II) was formed from among four theoretically possible ones. This indicates that the piperidone reacts

Card 1/3

MOKHINA, I.V. (Rostov-na-Donu)

Treatment of hemorrhagic complications caused by anticoagulants.  
Klin.med. 40 no.6:136-137 Je '62. (MIRA 15:9)

1. Iz nevrologicheskogo otdeleniya (zav. - prof. Ya.N. Korganov)  
1-y gorodskoy bol'nitsy (glavnyy vrach A.A. Morgun).  
(ANTICOAGULANTS (MEDICINE)) (HEMORRHAGE)

MOKHINA, I.V.

Comparative evaluation of the results of treating disorders of the brain's blood supply with and without the use of anticoagulants.  
Zhur.nevr.i psikh. 61 no.10:1477-1481 '61. (MIRA 15:11)

1. Nervnoye otdeleniye (zav. - prof. Ya.N.Korganov) 1-y Gorodskoy  
bol'nitsy (glavnyy vrach A.A.Morgun), Rostov-na-Donu.  
(CEREBROVASCULAR DISEASES) (ANTICOAGULANTS (MEDICINE))

POLYAKOV, I.I.; MOKHIN, K.M.

Electrophysiological study of the state of the central nervous system in experimental brucellosis. Biul. eksp. biol. i med. 53 no.2:52-57 F '62. (MIRA 15:3)

1. Iz patofiziologicheskoy laboratorii (zav. - kand.med.nauk K.M. Mokhin) Rostovskogo nauchno-issledovatel'skogo protivochumnogo instituta (dir. - kand.med.nauk ~~Shishkin~~ Shishkin), Ministerstva zdoravookhraneniya SSSR. Predstavlena deystvitel'nyy chlenom AMN SSSR N.N. Zhukovym-Verezhnikovym.

(BRUCELLOSIS)

(ELECTROENCEPHALOGRAPHY)

(~~NERVOUS SYSTEM~~ DISEASES)

MOKHIN, K.M.

Rate of blood flow in experimental plague. Biul. eksp. biol.  
i med. 53 no.2:47-52 F '62. (MIRA 15:3)

1. Iz patofiziologicheskoy laboratorii (zav. - kand.med.nauk  
K.M. Mokhin) Rostovskogo nauchno-issledovatel'skogo protivoo-  
chumnogo instituta (dir. - kand.med.nauk A.K. Shishkin) Minis-  
terstva zdravookhraneniya SSSR. Predstavlena deystvitel'nyy  
chlenom AMN SSSR N.M. Zhukovym-Verezhnikovym.

(PLAGUE) (BLOOD VOLUME)

~~MOSETH, K.M.~~

Conditions of capillary circulation in experimental plague  
[with summary in English]. Biul. eksp. biol. i med. 46 no. 10:  
43-46 0 '58 (MIRA 11:11)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo protivochumnogo  
instituta Ministerstva zdavookhraneniya SSSR (dir. A.K. Shishkin)  
Rostov-na-Donu. Predstavlena deystvitel'nym chlenom AMN SSSR  
N.N. Zhukovym-Verezhnikovym.

(PLAGUE, exper.

capillary permeability in guinea pigs (Rus))

(CAPILLARY PERMEABILITY,

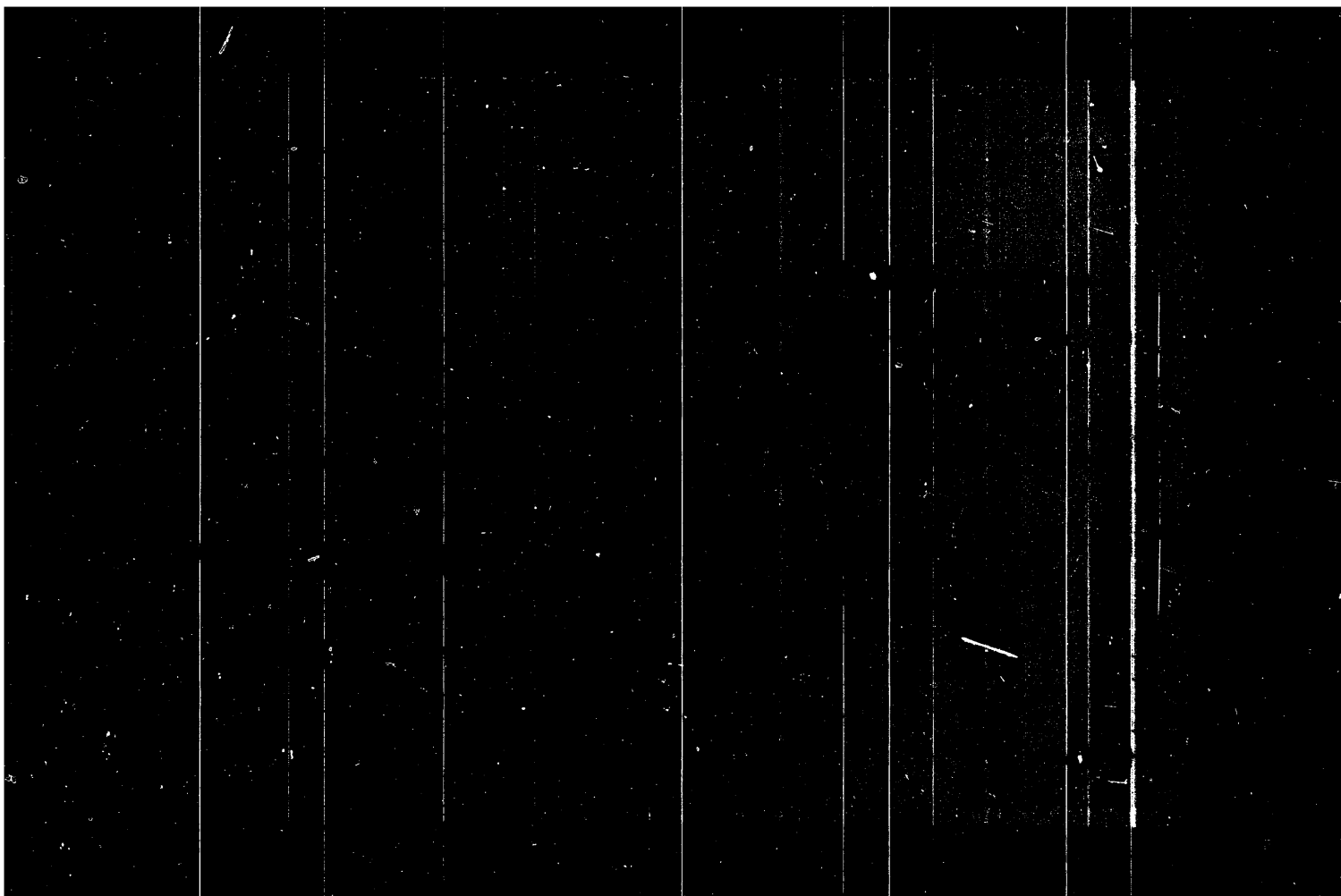
in exper. plague in guinea pigs (Rus))

MOKHIN, K. M.

"Electrophysiological Investigation of the Nervous System in Hemotransfusion Shock." Cand Med Sci, Rostov-on-Don Medical Inst, Rostov-on-Don, 1953. (RZhBiol, No 8, Dec 54)

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SO: Sum. No. 556, 24 Jun 55

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... Russian-language ...  
... a great number of staff ...  
... Engineering of the I.M.V.T

1940-1941, 1942-1943, 1944-1945, 1946-1947, 1948-1949, 1950-1951, 1952-1953, 1954-1955, 1956-1957, 1958-1959, 1960-1961, 1962-1963, 1964-1965, 1966-1967, 1968-1969, 1970-1971, 1972-1973, 1974-1975, 1976-1977, 1978-1979, 1980-1981, 1982-1983, 1984-1985, 1986-1987, 1988-1989, 1990-1991, 1992-1993, 1994-1995, 1996-1997, 1998-1999, 2000-2001, 2002-2003, 2004-2005, 2006-2007, 2008-2009, 2010-2011, 2012-2013, 2014-2015, 2016-2017, 2018-2019, 2020-2021, 2022-2023, 2024-2025, 2026-2027, 2028-2029, 2030-2031, 2032-2033, 2034-2035, 2036-2037, 2038-2039, 2040-2041, 2042-2043, 2044-2045, 2046-2047, 2048-2049, 2050-2051, 2052-2053, 2054-2055, 2056-2057, 2058-2059, 2060-2061, 2062-2063, 2064-2065, 2066-2067, 2068-2069, 2070-2071, 2072-2073, 2074-2075, 2076-2077, 2078-2079, 2080-2081, 2082-2083, 2084-2085, 2086-2087, 2088-2089, 2090-2091, 2092-2093, 2094-2095, 2096-2097, 2098-2099, 2100-2101, 2102-2103, 2104-2105, 2106-2107, 2108-2109, 2110-2111, 2112-2113, 2114-2115, 2116-2117, 2118-2119, 2120-2121, 2122-2123, 2124-2125, 2126-2127, 2128-2129, 2130-2131, 2132-2133, 2134-2135, 2136-2137, 2138-2139, 2140-2141, 2142-2143, 2144-2145, 2146-2147, 2148-2149, 2150-2151, 2152-2153, 2154-2155, 2156-2157, 2158-2159, 2160-2161, 2162-2163, 2164-2165, 2166-2167, 2168-2169, 2170-2171, 2172-2173, 2174-2175, 2176-2177, 2178-2179, 2180-2181, 2182-2183, 2184-2185, 2186-2187, 2188-2189, 2190-2191, 2192-2193, 2194-2195, 2196-2197, 2198-2199, 2200-2201, 2202-2203, 2204-2205, 2206-2207, 2208-2209, 2210-2211, 2212-2213, 2214-2215, 2216-2217, 2218-2219, 2220-2221, 2222-2223, 2224-2225, 2226-2227, 2228-2229, 2230-2231, 2232-2233, 2234-2235, 2236-2237, 2238-2239, 2240-2241, 2242-2243, 2244-2245, 2246-2247, 2248-2249, 2250-2251, 2252-2253, 2254-2255, 2256-2257, 2258-2259, 2260-2261, 2262-2263, 2264-2265, 2266-2267, 2268-2269, 2270-2271, 2272-2273, 2274-2275, 2276-2277, 2278-2279, 2280-2281, 2282-2283, 2284-2285, 2286-2287, 2288-2289, 2290-2291, 2292-2293, 2294-2295, 2296-2297, 2298-2299, 2300-2301, 2302-2303, 2304-2305, 2306-2307, 2308-2309, 2310-2311, 2312-2313, 2314-2315, 2316-2317, 2318-2319, 2320-2321, 2322-2323, 2324-2325, 2326-2327, 2328-2329, 2330-2331, 2332-2333, 2334-2335, 2336-2337, 2338-2339, 2340-2341, 2342-2343, 2344-2345, 2346-2347, 2348-2349, 2350-2351, 2352-2353, 2354-2355, 2356-2357, 2358-2359, 2360-2361, 2362-2363, 2364-2365, 2366-2367, 2368-2369, 2370-2371, 2372-2373, 2374-2375, 2376-2377, 2378-2379, 2380-2381, 2382-2383, 2384-2385, 2386-2387, 2388-2389, 2390-2391, 2392-2393, 2394-2395, 2396-2397, 2398-2399, 2400-2401, 2402-2403, 2404-2405, 2406-2407, 2408-2409, 2410-2411, 2412-2413, 2414-2415, 2416-2417, 2418-2419, 2420-2421, 2422-2423, 2424-2425, 2426-2427, 2428-2429, 2430-2431, 2432-2433, 2434-2435, 2436-2437, 2438-2439, 2440-2441, 2442-2443, 2444-2445, 2446-2447, 2448-2449, 2450-2451, 2452-2453, 2454-2455, 2456-2457, 2458-2459, 2460-2461, 2462-2463, 2464-2465, 2466-2467, 2468-2469, 2470-2471, 2472-2473, 2474-2475, 2476-2477, 2478-2479, 2480-2481, 2482-2483, 2484-2485, 2486-2487, 2488-2489, 2490-2491, 2492-2493, 2494-2495, 2496-2497, 2498-2499, 2500-2501, 2502-2503, 2504-2505, 2506-2507, 2508-2509, 2510-2511, 2512-2513, 2514-2515, 2516-2517, 2518-2519, 2520-2521, 2522-2523, 2524-2525, 2526-2527, 2528-2529, 2530-2531, 2532-2533, 2534-2535, 2536-2537, 2538-2539, 2540-2541, 2542-2543, 2544-2545, 2546-2547, 2548-2549, 2550-2551, 2552-2553, 2554-2555, 2556-2557, 2558-2559, 2560-2561, 2562-2563, 2564-2565, 2566-2567, 2568-2569, 2570-2571, 2572-2573, 2574-2575, 2576-2577, 2578-2579, 2580-2581, 2582-2583, 2584-2585, 2586-2587, 2588-2589, 2590-2591, 2592-2593, 2594-2595, 2596-2597, 2598-2599, 2600-2601, 2602-2603, 2604-2605, 2606-2607, 2608-2609, 2610-2611, 2612-2613, 2614-2615, 2616-2617, 2618-2619, 2620-2621, 2622-2623, 2624-2625, 2626-2627, 2628-2629, 2630-2631, 2632-2633, 2634-2635, 2636-2637, 2638-2639, 2640-2641, 2642-2643, 2644-2645, 2646-2647, 2648-2649, 2650-2651, 2652-2653, 2654-2655, 2656-2657, 2658-2659, 2660-2661, 2662-2663, 2664-2665, 2666-2667, 2668-2669, 2670-2671, 2672-2673, 2674-2675, 2676-2677, 2678-2679, 2680-2681, 2682-2683, 26